Clinical Lecture
ON LITHOTOMY.

Delivered at St. Thomas's Hospital,

BY SAMUEL SOLLY, ESQ., F.R.S.,
SURGEON TO THE HOSPITAL.

PART III.—(*Concluded from p.* 33.)

No. 40—aged three years and a half. In this case I used Key's knife, and the patient recovered rapidly.

No. 41—five years old; successful.

No. 42—a healthy-looking man, aged sixty-five; removed successfully a stone weighing two ounces and five drachms. This was a very large stone, as you will see by the annexed woodcuts, which give a front and side view of the stone.

FIG. 2.

Nevertheless, there was no particular difficulty in extracting it. Supposing you should find a difficulty in the operation from the size of the stone, you must not hesitate to enlarge your opening by dividing some of the grasping fibres of the bladder over the stone; also take care to push back the bladder off the stone with your finger, instead of dragging it through by main force. It is much better to drop the stone if there is any great difficulty in extracting it, and alter the axis in which you grasp it, than use any force. Also press the stone towards the rectum, rather than upwards towards the arch of the pubis.

Mr. Charles Mayo, of Winchester, successfully extracted a stone weighing fourteen ounces two drachms avoirdupois, from a patient, twenty-eight years of age. "I got the stone to the outlet of the pelvis by means of the forceps, and then Mr. Wickham passed a strong iron scoop under the arch of the pubis, which acted as a lever: by their combined action, applied with all the force they could exert, the stone fortunately broke into several large fragments."*

Mr. Dickinson, of Macclesfield, extracted successfully a stone weighing ten ounces, from a man aged sixty-two. This was broken in the bladder after it had been opened. The patient had sloughing of the rectum.

Mr. Dalrymple, senior, failed in extracting one weighing twelve ounces, as the patient died the following day.

Mr. Earle gives a long list of cases in which the operation failed from the great size of the stone. "Of the prodigious number of cases in which Cheselden operated, the three largest stones successfully extracted weighed respectively twelve, ten, and eight ounces."

* Medico-Chirurgical Transactions, vol. xi.

No. 43 was a successful case; and as it presents some points of practical interest I will detail them at more length:—

F. W——, aged eight, was sent to me by an old student of St. Thomas's, Mr. Rose, of Wycombe. This case was a healthy-looking boy, with none of the cachexia which usually attends this disease in children. I should have operated on him very shortly after his admission if I had not been troubled by the occasional and periodical appearance of erysipelas in the ward. Though each case, as it arose, was immediately removed to the casualty ward, still fresh cases appeared, generally after the interval of a week. Fortunately the boy did not suffer, so that I had not that trouble to worry me, and add to my regret in being obliged to postpone the operation from week to week.

You may perhaps feel surprised, since you have seen the great size of the stone (larger than a pullet's egg, and an ounce in weight), that his sufferings were so slight; but the fact is, that a smaller and rougher stone always induces more pain. A large stone remains quietly in the lower fundus of the bladder; it does not fall over the orifice of the urethra, stopping the flow of urine, and giving rise to those frightful spasmodic attempts to pass it which usually accompany the presence of stone in the bladder in children.

As regards the operation, I performed it with Key's knife, and there was nothing peculiar regarding it. There was a rather free hæmorrhage, but a little pressure in the wound for about five or ten minutes, and exposure to the air, entirely stopped it. For the first forty-eight hours the case was progressing in every respect as well as possible. But on the Tuesday morning—that is, the third day after the operation—a circumstance occurred which alarmed the sister and the house-surgeon as well as the boy, who said he was going to die. The urine came with a sudden forcing rush through the urethra, and at the same time blood in a small quantity flowed from the wound. The passage of urine gave him a good deal of pain.

This is just one of those incidents which every now and then occur after lithotomy. It is, I believe, occasioned by a little tumefaction of the sides of the wound at the neck of the bladder, which prevents the urine flowing through the wound. It is of no importance. Fortunately, I happened to come into the ward just at the time, and I was able to calm my little patient, who is remarkably intelligent, though a very sensitive child. The urine has since found its way through the wound, and he is progressing favourably in every respect.

No. 44 was a boy only five years of age, presenting a very different aspect to the last. He was a miserable, thin, unhealthy-looking child, and his sufferings made me anxious to operate; but the same cause delayed the operation in both cases. In the first-mentioned case my patient was none the worse for the delay; but in the second he was immensely benefited. The child improved daily in appearance; and the kind, motherly, but judicious care which the late Sister Abraham invariably bestowed on all her cases told most favourably on this poor boy. The colour returned to his cheeks, he gained flesh, he lost much of his peevish irritability, and his local sufferings were evidently much less. The bladder became less irritable as he improved in health.

There was no hæmorrhage in this case, and he progressed favourably until the Monday evening, when he became rather feverish and hollow-eyed. He complained of pain at the lower part of the abdomen, and was restless and uncomfortable. He was ordered a little gin and some calomel and opium, with a small dose of castor oil in the morning.

He was better the next day, but still he had no appetite, and refused everything that was offered him—beef-tea, jelly, &c. On the following day the sister found out that he liked porter, so she very wisely gave him a little; and this induced him to take some fish. Since then he has recovered rapidly.

Now, gentlemen, you will find that it is upon judiciously watching these cases, and humouring the fancies of your patient in regard to diet and stimulants, that your success as a lithotomist will often depend.

No. 45 was just one of those cases in which the operation was of no use, though it cannot be said to have been the cause of death. The patient was seventy-two years of age, worn out by the presence of a stone in his bladder undiscovered for many years. This occurred, not through any inattention on the part of his medical adviser, but from circumstances over which he had no control. The fact is that the poor fellow thus diseased, who was a clerk, had been robbing his employers, and the first day that he was absent from his desk his peculations were discovered; so that he had not had a holiday for nearly twenty years. He had been suffering occasionally from bronchitis.

Well, what was to be done? Was I to leave the poor old man to die, with all the misery of a bladder ulcerating from the pressure of a stone, or was I to try by the operation of lithotomy to save his life? I wished to move him to the hospital, but he had a great dread of this from various circumstances, but especially, I suspect, from his peculiar position. So that everything seemed against him. Nevertheless I determined to operate; and, without any difficulty, I removed two large stones. He went on perfectly well for the first five days, and then sank in about twenty-four hours from a low bronchitic attack.

No. 46.—A delicate-looking boy, aged three years and a half. He got well without any drawbacks.

No. 47 was a diseased old man, aged sixty-two, who died on the third day with ulceration of the bladder, a diseased heart and liver, with gall-stones. He never thoroughly rallied from the chloroform.

No. 48.—This was the youngest child I have ever cut for stone. He was only a year and a half old; but he got well in a very short time.

No. 49 was a child four years old. A rapid recovery.

No. 50.—A patient fifty-six years old. The case proved fatal. This man was plethoric and rather full-blooded; but he had not suffered for more than eighteen months. He did not suffer from any pain in the extremity of the penis, as is usual in such cases, but in the perineum. He was admitted on the 2nd of November, and I operated just a week after his admission. We find it very important to let patients get accustomed to the hospital; they feel at home then, and bear the operation better. I removed a very large flat stone in the usual way, employing the beak-pointed knife. The weight of the calculus was an ounce and a quarter. There was a very free hæmorrhage; but it stopped soon after he was in bed. The first two days he was very well, though occasionally complaining of faintness. On Nov. 11th (the fourth day) there was some abdominal pain; but a little gin-and-water removed it. He slept well, and said he was comfortable. On Nov. 12th, at five P.M., he felt rather sick, and had return of pain, but no actual vomiting. He complained of weariness, and the colour left his face. His pulse became small and weak. Beef-tea, arrowroot, and gin-and-water were repeatedly given. The stimulants appeared to revive him, but produced no permanent benefit, the pulse continuing very low. The abdominal pain did not increase; but he gradually became weaker till six A.M. on the morning of the 13th—i. e., the fifth day after the operation, when he died.

The post-mortem examination revealed some peritonitis, with effusion of lymph. The muscular coat of the bladder was much thickened, but there was no ulceration of the mucous coat or extravasation of urine into the abdomen to account for the peritonitis. The edges of the wound made in the bladder for the extraction of the stone were slightly inflamed. The liver was large, and the kidneys were embedded in fat, but not diseased. The lungs were emphysematous and congested; the aortic valves of the heart softened.

In this case, the signs of peritonitis were so masked, and the general debility so great, that we had no reason to employ any active antiphlogistic measure; and I do not think that, if such had been adopted, it would have influenced the result. I believe that it was one of those cases of low peritonitis analogous to erysipelas, and which occasionally follow parturition in an atmosphere poisoned with erysipelas.

No. 51 was a boy aged three years and a half, on whom I operated in the Hemel Hempstead Infirmary. I used Key's knife, and the child recovered rapidly.

There is one circumstance in regard to the operation which I may here mention—namely, the difficulty there sometimes is in finding the stone after the bladder is opened. Sir James Earle says, "Very early in life I made an observation which has since been of infinite service to me: I remarked that in all those cases which died of the operation the stone had been found with difficulty." In fact, in these cases the bladder must have been bruised; but this need not be. You should always search for the stone with the blades of your forceps closed, using them as a sound; and if this does not succeed, open them very gently so as to slightly stretch the bladder, and if the stone is lodged in any of the folds, it will drop out and fall into the fundus of the bladder, where it may be seized. If this is also unsuccessful, use the curved forceps and introduce the finger of the other hand into the rectum.

Previous to the performance of the last operation on my list, I had a case of stone in the hospital which was fatal without any operation being attempted, and therefore it does not come into the fatal column. The patient was a child four years of age. He had suffered from symptoms of stone for three years, till at last his parents brought him to the hospital to die. He was admitted on the 14th of January, and died on the 21st of February.

Now if this boy had been admitted only a few months earlier, I have no doubt that I should have felt it my duty to operate in pity for his sufferings, which were painful to witness; but, from the revelations of the post-mortem examination, the result must have been the same, and another added to my list of fatal cases. The child was pale and emaciated, but for a few days, under the use of tonics and stimulants, the flame brightened up so much that I trusted the case might not prove hopeless. The improvement, however, was too short-lived to justify any operation.

The bladder was filled by two stones, as exhibited in Fig. 3, the lower stone fitting into the upper like a cup and ball, or rather, I should say, like a ball and cup.

FIG. 3.

No. 52.—I operated on the 5th of October. Most of you witnessed the operation, in which there was nothing peculiar. I used the probe-pointed knife to open the bladder, and removed the stone with the scoop and finger, as it slipped in the forceps, which its conical shape accounted for. I will, however, proceed to give you some details of the case:—

R. H——, aged twelve years, has been delicate from birth, and has had symptoms of stone since he was four years old. There was a good deal of suffering when admitted, so I ordered him the compound buchu mixture, from which he derived some relief; and with a good nourishing diet his general health improved. The operation was, as usual, performed under the influence of chloroform, and about four hours afterwards he had a draught containing fifteen minims of tincture of opium. On the following day he is reported to have passed a good night; but his pulse was 120, skin hot and dry, tongue brown, and he was very thirsty: in short, there were all the signs of peritonitis. Ordered, one grain of mercury and half a grain of opium, every four hours; also beef-tea. From this time he went on badly, and died on the fifth day from the date of the operation.

The post-mortem examination showed slight peritonitis in the lower part of the abdomen. The opening into the bladder made by the operation was small, and presented no peculiar

FIG. 4.

appearance; the rest of the mucous surface was quite healthy and uninjured. The stone removed is marked *b*. In the left kidney there was a long spiked calculus, (*a* and *c* represent front and back views,) occupying two calices, so it could not be dislodged without laying them into one. The lining membrane in contact with the stone was so dark-coloured as to be almost gangrenous. This was, I suppose, the real cause of death. It is true that there was no extension of the pyelitis into the bladder, but I cannot believe that this operation would have set up the peritonitis. There was no circumstance attending the operation to excite peritonitis: there was no difficulty or delay in the extraction of the stone; no dragging of the soft parts from the opening being too small, and no incision into the post-vesical cellular tissue from the opening being too large; no injury or ulceration of the mucous membrane of the bladder giving rise to extravasation of urine.

I dare say that many of you will remember that, previous to his death, I suggested the probability of a stone incarcerated in the kidney being the cause of his sufferings after the operation. This opinion was derived partly from the fact that the stone I removed from the bladder had the shape and general characters of a renal calculus, and partly from the history of the case given by his mother. I suppose, therefore, that he died from sympathetic fever induced by the operation and incarceration of the renal calculus.

The following is the official report of the post-mortem examination by Dr. Montgomery:—

"Robert H——, aged twelve years, admitted into Abraham ward, Sept. 18th, 1861, under the care of Mr. Solly; died Oct. 10th, 1861. The body was emaciated. There was a wound in the perineum about an inch long. The boy had been operated upon for stone. The mucous membrane of the larynx and trachea was healthy. The lungs appeared healthy, and their substance was rather dry. The heart and its valves were normal. The liver was somewhat fatty; spleen very soft. In the left kidney there was a large branched calculus, and the substance of the kidney was rarefied; the ureter was not distended. The right kidney was healthy. There was a considerable quantity of yellow, coagulated lymph adherent to the abdominal walls near the pelvis. The bladder and rectum were glued together by recent coagulated lymph. The areolar tissue of the pelvis was extensively inflamed; it was suppurating. The walls of the bladder were considerably thickened."

You will perhaps like to ask me whether, if I could have diagnosed the probability of a calculus in the kidney as well as in the bladder, would I still have operated? I answer most decidedly, Yes; and for this reason, that without the operation the poor child must have died in great agony, and that the operation gave him a chance of recovery. No surgeon can be certain that his patient has an incarcerated stone in the kidney, though he might suspect it, and trust to its passing, as the original one did, into the bladder. This has occurred before now, and a surgeon has been unjustly blamed for leaving a calculus in the bladder, when he really only left it in the kidney, where, of course, he could not reach it.

No. 53 was a healthy boy, eight years old. He went on from first to last without a bad symptom.

No. 54 was the boy on whom I had previously operated in the Hemel Hempstead Infirmary. He has again done well.

ON THE

OSTEOLOGY AND DENTITION OF THE ANDAMAN ISLANDERS.*

BY PROFESSOR OWEN, F.R.S.

FOR a long-coveted opportunity of becoming acquainted with this race, I am indebted to an energetic officer of the Indian Government—Dr. Mouat. On that gentleman's return to England in 1861, he showed me the skeleton of an adult Andaman male, which has since been presented by Dr. Mouat to the British Museum. The islands are divided into Great and Little, and the former into North, Middle, and South; so closely contiguous as to form a group 140 miles long, and not more than 20 miles across. They are inhabited by a race of undersized or dwarfed blacks, of great audacity and implacability to strangers. Their skin is jet black, their hair woolly, and their lips are thick, but less prominent than those of a Guinea negro. They are in the habit of shaving off all their hair except the eyelashes. They generally inhabit the jungle, but they are migratory, and seldom stop in one spot. All have similar habits, and the same language and customs. They seem to have no notion of a Supreme Being, or of a future existence. They are naked, and not ashamed. They take fish left by the ebb tide in small nets, which are chiefly made by the women. They tattoo by incising the skin by bits of glass, without, however, inserting coloured matter, the cicatrix being whiter than the sound skin. The boys play with bow-and-arrow, and take good aim; at an early age they go into the jungle with their fathers. The encampments usually enclose a central place, in which there is one hut more carefully roofed-in than the others, and this is the residence of the local chief, who gives all orders with regard to fighting and retreating, as may be found necessary. Whenever a death occurs, the body is buried a few hours afterwards. It is covered with leaves, the carrier conveying it with his back turned to the corpse; and it is attended by two or three relatives to the place of interment, which is usually about a mile from the sea-shore. The body is lifted into the grave by means of a sling, and then a small mound of earth is erected over it. About two or three months after the burial the bones are disinterred, carried to the encampment, and wept over by the relatives. The principal relative generally takes the skull, while others take various bones, which are nailed to the posts of their huts.

Upon the table is an Andaman skeleton. It is that of a person about thirty years of age. The cranium is well formed, and might be classed with those of the full oval type. The frontal region is narrow, but not low; the nasals are not flat, but moderately developed; the chin a little protruded, but not deep. The base of the skull offers all the usual human appearances. The teeth are not larger than those of Europeans, but seem large in proportion to the size of the jaws; all the lower molars have decided anterior and posterior roots. All the bones present the characteristic structure of those of the *homo sapiens* of Linnæus. The dimensions of the principal limb bones show that these Andamans are about four feet ten inches in height. They appear to have no idea of their own origin; and it has been inferred that they might be the descendants of African negroes sent by the Portuguese and wrecked at Pegu; but these are mere theories, and are not to be relied upon, as the Andamans do not present the peculiar characteristics of African negroes. I presume that the Portuguese would import from the Guinea islands persons of the usual stature; and it is hardly possible that the Andamans who are so bountifully supplied with provisions should have dwarfed to their present stature. I conclude, therefore, that they are aborigines, and merely represent the Africans in blackness, which they might have got from exposure for generations. They are more distinct from the Australian or Papuan negro than from the African, especially with regard to their molar teeth. There is no better evidence of their Malayan or Mongolian origin; but I offer no opinion that they originated in any locality of the opposite continent. Andaman might have been part of some extent of the dry land which had been seen in the range of the Himalayan mountains within the tertiary period. This has been the opinion of geologists for some time, and is alluded to by Professor Ansted in his "Ancient World," and by Sir J. E. Tennent, who has offered valuable evidence in support of such an opinion from the peculiar zoology of Ceylon. The whole of the shores of the Andamans are skirted with coral reefs, and are the seat of active volcanoes; and we should, doubtless, err in opinion as to the origin of the population if we concluded that the islands are now as they were when they received their first population.

The Andamans are a most primitive people, at the lowest step of civilization, and have carried the inventive faculties no further than is necessary for the supply of their own wants. Their animal appetites are gratified in the simplest way; and when a male comes to years of puberty, a woman is assigned to him as his wife and servant. They are not cannibals; indeed, no traces of cannibalism have been found amongst them. Implacably hostile to strangers, the Andamans have made no advances to higher races which may have approached them. Perhaps the only change they have made is in the weapons which they use for warfare. So they may have existed for thousands of years; and there is really nothing on which the ethnologist can found an opinion as to the number of generations through which the Andamans have continued to exist. They may have existed through all the geological changes which their islands have experienced. The cranium of these people evidences an aptitude for civilization. They are dwarfish, but they have a much better formed cranium and limbs than

* Report of a paper read before the Ethnological Society, Jan. 14th, 1862.

ME TIGHTLY BOUND

the negroes either of Australia or Africa. (These points were illustrated by a well-executed diagram.) They have better developments of the nasal bones and of the upper jaw than the other tribes, but more particularly excel them in the oval shape of the skull, and its thinness.

OBSERVATIONS ON CERTAIN TUMOURS OF THE NECK,

WITH NOTES RELATING TO ITS SURGICAL ANATOMY.

BY ANDREW MELVILLE M'WHINNIE, ESQ., F.R.C.S.

(*Continued from p. 34.*)

BRONCHOCELE differs from all other swellings in the circumstance of its varying bulk dependent upon the general condition of the system. We find it affected even by external hygrometrical influences alone, increasing in volume to an inconvenient extent in damp weather, and becoming restored to its ordinary tranquil state under the opposite and more favourable condition of the atmosphere.

Enlargement of the thyroid may, under particular circumstances, simulate and be mistaken for other swellings. The following are the main features of such a one, which bore a resemblance, in some respects, to the tumour represented in Fig. 1.* The case derives additional interest from the fact of its having been considered by a distinguished practitioner to be an aneurism of one or other of the large bloodvessels of the chest.

An elderly man was lately admitted into one of the French hospitals on account of retention of urine from an enlarged prostate gland, from the effects of which he died. Whilst under treatment, the surgeon's attention was attracted by a marked peculiarity of the patient's voice (*une altération notable de la voix*), "characteristic of compression of the larynx, or of one of the inferior laryngeal nerves." On the right side of the neck, and immediately above the clavicle, was a tumour placed behind the sterno-mastoid muscle, ascending as high as the inferior border of the thyroid cartilage, and covered by a network of varicose veins. Externally, the common carotid, pushed aside by the tumour, could be distinctly traced over it. The swelling, which was firm, pulsated forcibly like an aneurism of a large artery, and which it was considered to be. This view seemed confirmed from auscultation, by which a bruit de soufflet was readily detected. M. Nélaton pronounced it to be an aneurism of the arch of the aorta, involving, perhaps, the brachio-cephalic artery. During deglutition the tumour remained perfectly fixed and immovable.

The post-mortem inspection showed how complete had been the error of diagnosis. The tumour was found to consist of an enlargement of the right lobe of the thyroid, extending downwards, as in my case, behind the corresponding sterno-mastoid and clavicle into the chest, where, by its pressure, it had considerably flattened the trachea. Its encroachment on the lower part of this tube explained the immobility of the tumour during the movements of the larynx. The right primitive carotid passed over its external surface. The left lobe was perfectly natural, and, from the absence of isthmus, was totally unconnected with the hypertrophied right one, as in the early fœtal state. The left ventricle was found considerably hypertrophied, and the arch of the aorta was dilated to twice its natural calibre. Its pulsations had been conveyed through the thyroid tumour, which it had lifted up; whilst the bellows sound, referable to thickened and ossified semilunar valves, had been conducted in the same way, thus leading to the mistake in diagnosis.

In the museum of the Sussex County Hospital is a preparation which displays the following relations of a bronchocele to the large neighbouring vessels, the pulsation of which must have been strongly communicated to it during life:—The enlarged right lobe rests inferiorly upon the arteria innominata, and has the common carotid artery ascending over its front and outer surface. It is seen to have insinuated itself between that vessel and the subclavian; this, together with an enormous inferior thyroid artery, are placed behind the lower part of the tumour. Here the enlargement, to a smaller degree also, of the left lobe would, however, if doubt existed, at once have indicated the nature of the affection. In vol. xxvi., second series, of the "Medico-Chirurgical Transactions," just published, is a communication from my friend, Dr. Joseph Bullar, of Southampton, on the subject of pulsating bronchocele. A gentleman consulted him on account of two pulsating tumours, one on each side of the trachea, attended with so much purring sound, as well as vibration communicated to the touch, that the complaint had been mistaken for double carotid aneurism. The other patient was a female, aged fifty-two, having a bronchocele which pulsated. In these patients the eyeballs were particularly prominent. "Both were benefited by iodide of potassium internally and iodine externally, and by iron; but in both cases the chief point in removing the pulsation was by improving the general health: in one case by relieving great general debility by tonics, fresh air, nutritious food, and rest; and in the other, by diuretics, removing a dropsical condition and venous plethora. The most important lesson taught by them is in their prognosis. The appearance of both was formidable, and might easily excuse the suspicion of aneurism or malignant disease; but in both the pulsation proved to be a harmless and remediable complication."

There are instances of tumours in the neck at first sight resembling goitre. Amongst those which have come under my notice may be selected the one represented in Fig. 4, here introduced as combining several points of interest worthy of notice.

Mrs. M. R——, about forty years of age, of healthy constitution, was sent to me by a gentleman in the early part of this year, with a large pendulous tumour of the neck, which he regarded as a bronchocele of the left side; and, indeed, suspended

FIG. 4.

apparently from the thyroid region was a tumour of considerable size, with no discoloration of the skin, extending several inches below the clavicle, and realizing the description which has been given of a pendulous bronchocele—viz., "that it is not unlike the dew-lap of a turkey-cock, the bottom being the largest part."

Before placing my hand upon the tumour, or interrogating the patient, I requested her, in order to see the effect upon the throat in deglutition, to drink some wine. The swelling failed to accompany the movements of the larynx in swallowing. The absence, too, of sufficient corresponding fulness above, in the region of the thyroid body, coupled with the circumstance—to me an unusual one—of the swelling being confined to the left side, at once led to the belief that this disfiguring tumour was not of the nature of a bronchocele. Another surgeon happened at the time to come in, and pronounced it to be a hydrocele of the neck; a cicatrix at the lower part indicating a former puncture seemed to justify him in such view. Here, as in most cases, caution was necessary in forming a diagnosis. On inquiring into the history of the swelling, which was tolerably firm and unyielding to the touch, and not attended with pain, or subject to periodical change in volume, she stated that

* *Vide* THE LANCET of July 13th, 1861, p. 30.

thirteen years previously she had received a blow of the fist from her first husband under the left ear; this was followed by pain and swelling of the part, and it at first felt "as if the kernels of her ears were down," and was accompanied with great stiffness of the neck. The swelling just below the ear went on increasing, and shortly attained the size of an orange. In this condition she went into King's College Hospital, where she remained six weeks, and submitted to some operation by Mr. Fergusson, and pointed to the cicatrix, now removed to such a distance below the lobe of the ear, that it would have been hard to believe or understand how any operation had been practised so high in the neck as the part she described.

I requested the patient to call upon and allow Mr. Fergusson to examine the tumour. That gentleman says he has a tolerable recollection of her case. At the time, when opened, it was only a thin cyst, and resembled others that he had seen in this respect—namely, that it seemed a sort of "well-spring" of arterial blood. Mr. Fergusson, in kindly writing to me, adds: "I consider it a solid and vascular tumour, which should not be meddled with." Irrespective of i s having been regarded as hypertrophy of the thyroid body,—at first glance a pardonable mistake,—the swelling is remarkable from its history; from the alteration which in size, shape, and consistence, during this lapse of time, has taken place in it; and the change of situation which the cicatrix has undergone, it having travelled so low down from its original situation.

The above case of disfiguring pendulous tumour justifies the mention made in a preceding paper of certain points which might facilitate the diagnosis of tumours situate in front of the throat.

A certain degree of beauty is attributed by the uneducated and unrefined to a prominent fulness of the front of the neck. Amongst the ancient busts it is rare to find instances in which there appears any intumescence confined to the immediate region of the thyroid body, or any enlargement such as that to which the Greek medical writers restricted, as we do, the use of the word bronchocele. Only in the well-authenticated bust of Julius Cæsar, in the British Museum, have I noticed any enlargement in this situation. Here there is a marked central projection below the larynx, precisely in the situation of the isthmus. On pointing out this feature to my friend, Professor Owen, he at once admitted the peculiarity which characterizes, I believe, the medals of the great Roman Emperor.

A bust exists of the luxurious and gluttonous Emperor Vitellius, in which there is an enlargement in the throat, but evidently proceeding from obesity. One or two instances likewise may be seen of busts of fauns and satyrs where the pendulous appendages of the goat's neck are represented. Artists do not consider a great fulness there as a type of beauty; for even with the head bent downwards and forwards there ought to be a certain degree of flatness by which the course of the lower jaw bone may be traced. It is the successful treatment of flatnesses, in artistic phrase, which contributes to the subtleties of fine discriminative form in sculpture; and the judicious treatment of these proves the accomplished artist. Wherever a general enlargement occurs, it is mostly looked upon as a mark of sensuality, and, by giving a preponderance to the lower part, takes away from, and interferes considerably with, the intellectual appearance of the head, as shown in several familiar instances of modern busts.

(To be continued.)

ON THE

CONDITION OF THE MOUTH IN IDIOCY.

BY J. LANGDON H. DOWN, M.D. LOND.,

ASSISTANT PHYSICIAN AND LECTURER ON COMPARATIVE ANATOMY AT THE LONDON HOSPITAL;

PHYSICIAN TO THE ASYLUM FOR IDIOTS, EARLSWOOD.

THE opinion which has been formed, both in and out of the profession, in reference to idiocy, has arisen more from the representations of poets and romance-writers than from the deductions of rigid observation. The popular novelist, in this as in other cases, seizes on the characteristics of some exaggerated specimen, pourtrays them by the aid of a vivid imagination, and henceforth the exaggeration becomes the type of a species in the minds of men. The term idiot has thus become synonymous with the most degraded condition of humanity only—with a creature incapable of being influenced by moral or physical treatment, and separated by an immense gulf from the remainder of mankind. It has arisen, in no small degree, from the existence of this opinion, that until within a comparatively recent period, so few efforts have been made to ameliorate the condition of idiots. In too many cases they have been neglected or allowed to be influenced for evil, regardless of the fact that they might be equally impressed for good. Independently of the benefit that can be effected for these unfortunate sufferers, the benevolent efforts on their behalf have furnished an opportunity for an investigation into their physical and psychical life before unattainable.

The condition of the idiot is not simply one of mental alienation. It frequently presents also grave physical deterioration; and this physical alteration is as much a test of idiocy as is the low condition of mental power. In a community such as that of the Earlswood Asylum, there is to be found every variety of imbecile mind. In fact, just as in the outer world there is a graduated series from the most commonplace intellects,—who are "the hewers of wood and drawers of water,"—up to the giant minds that leave their impress on the age in which they live; so is there amongst an imbecile population a gradual shading in an inverse direction—from the youth who might, if he had property, become the subject of inquiry before a Master in Lunacy, to one who, with every means of communication with the external world, except feeling, closed, vegetates in impenetrable mist. In such a community one can perceive the grades of physical condition accompanying the mental phases; and a study of the physical anomalies becomes as interesting and important as that of the psychological state. When contemplating so large a number as that which Earlswood shelters, one is able to set some of the members aside into natural groups, by simple reference to their physical state, and to predicate from that state what will be their probable future mental improvement.

There is scarcely an organ in the body but may be found gravely altered in idiots: the circulation and respiration are abnormal; the skin exhibits perturbed functions; defective innervation, lesions of motility and nutrition, are abundantly met with; the bodily conformation is often of an aberrant kind. Regard therefore should be paid, in all cases of diagnosis of idiocy, to the physical condition as confirmatory of any opinion based on purely psychological data. It is in this way one is enabled to differentiate an idiot from a simply backward or ill-regulated child.

It is from the conviction of the importance of a study of the physiological manifestations of idiocy, that I have been induced to devote no small portion of time to an investigation into the structure and functions of the various organs *seriatim* amongst idiots and imbeciles. I purpose in the present paper giving some of the results of my observations of the feeble-minded, in reference to the condition and conformation of their mouths. Characteristic as is this region of various transitory mental phases amongst the sane, does it bear the permanent impress of a state in which the mind has failed in attaining its normal condition? If so, what is the nature of the impress? Does any value attach to the conformation of the mouth as confirmatory or otherwise of a state of mental incapacity? These are some of the questions we have to solve.

I may premise that these observations have been made during the past year, without reference to any recent legal inquiry, and extend over 200 cases, which have been taken, without any special selection, from a larger number. Not one on the list would in his present condition be able to manage his own affairs, or be legally held to be responsible. Many of them, however, are susceptible of considerable culture, are affected by the amenities of life, write letters to their friends, make small purchases, and form friendships. Several perform mechanical work with system and order. One, although possessing very little judgment, has been taught French and La in, and reads these languages as well as ordinary schoolboys. Some few possess extraordinary memories and special aptitudes. 146 were males, and 54 females. Their ages ranged from 7 to 36, and the following table gives the numbers at each age last birthday:—

No.	Age.	No.	Age.	No.	Age.
2	at 7 ...	14	at 16 ...	5	at 25
4	,, 8 ...	18	,, 17 ...	1	,, 26
2	,, 9 ...	10	,, 18 ...	3	,, 27
4	,, 10 ...	14	,, 19 ...	2	,, 28
10	,, 11 ...	18	,, 20 ...	1	,, 29
13	,, 12 ...	7	,, 21 ...	3	,, 30
11	,, 13 ...	12	,, 22 ...	2	,, 33
12	,, 14 ...	9	,, 23 ...	1	,, 34
17	,, 15 ...	3	,, 24 ...	2	,, 36

Or ranged in decennial periods—below 10 years, 8; from 10 to 19 inclusive, 123; from 20 to 29, 61; from 30 to 39, 8.

Palate.—Amongst the 200 cases included in this inquiry, 82 possessed palates inordinately arched, and with this increased arching were noticed various abnormalities. In some the palate was unsymmetrical, the two sides having different degrees of concavity, or one side plane, and the other concave. In 34 the palates were excessively arched, approximating to the appearance of the roof of a house, and, with this extreme angularity, was great narrowness. Excessive arching of the palate occurred, therefore, in 58 per cent. Excessive flattening of the palate was observed in 4 cases. In 34 cases, or 17 per cent., the palate had a very prominent antero posterior ridge or keel, corresponding to the line of approximation of the palatal bones. In 7 the palate bones did not meet, leaving a sulcus between them, the mucous membrane being, however, continuous. There was no instance of the ordinary cleft palate, and I may remark that in an examination of nearly 600 idiots, I have failed in meeting with an example of that deformity. In several the hard palate extended but a short distance posteriorly, from defect of the palatal process of the superior maxillary bone and entire absence of the palatal process of the palate bone, and in all these cases the velum palati was unusually flaccid. In the majority of cases there was marked narrowness of the palate. The following table represents the measurements in 24ths of an inch of the space between the posterior bicuspid teeth of opposite sides:—

No.	Distance. In.	No.	Distance. In.	No.	Distance. In.
2 at	12/24 ...	11 at	13/24 ...	13 at	14/24
1 ,,	11/24 ...	24 ,,	1 ...	9 ,,	15/24
3 ,,	12/24 ...	37 ,,	16/24 ...	1 ,,	17/24
2 ,,	12/24 ...	25 ,,	17/24 ...	5 ,,	18/24
13 ,,	14/24 ...	23 ,,	18/24 ...	3 ,,	19/24
10 ,,	13/24 ...	17 ,,	19/24 ...	1 ,,	19½/24

It will be observed that 33 per cent. do not exceed 1 inch, and that 62 per cent., while being more than 1 inch, do not exceed 1¼ inch; whereas the normal average has been stated to be 1¼ inch. It is worthy of notice that these numbers hold no direct relation to the age or stature of the patients examined. Thus, in a youth 22 years of age and 6 ft. 1 in. in height, so narrow is the palate that there is only 17/24 inch between the bicuspids, and only 12/24 inch between the opposite gums at their widest interval. The lowest measurements occurred in a boy and girl, the boy 12 and the girl 13 years of age. Neither is there a direct relation between the width of the palate and the cranial capacity; for in a microcephal, whose palate was 13/24 inch wide, the internal canthi of the eyes were 14/24 inch distant from one another; while in a macrocephal whose palate was 13/24 inch wide, the distance between the internal canthi amounted to 2 inches.

Teeth.—The principal characteristics of the teeth in idiots are, that the period of the first dentition is delayed, the second dentition considerably postponed, and that they undergo very general and rapid decay. In many cases the anterior surface of the incisors presents a honeycombed appearance, but in no one instance have I observed those special characters which have been well shown by Mr. Hutchinson to be significant of congenital syphilis. In a large number of cases they are developed irregularly, are crowded, and the canine occupy a different plane from the other teeth,—all these irregularities resulting from the imperfect development of the superior maxillary bone. In 6 cases, or 3 per cent., the upper incisors projected to such an extreme degree as to produce grave deformity. In 7 cases the teeth of the lower jaw were in advance of those of the upper.

Tongue.—The most prevailing character noticeable in the tongue of idiots is the hypertrophy of the fungiform papillæ. Undue prominence of the papillæ was observed in 101 instances. In several there is a marked want of co-ordination in the movements of the tongue, so that the patient, although endeavouring to comply with the request, is unable to protrude it. This condition is usually associated with an absence of general co-ordinated movements, and in the improvement which is effected by treatment it is usually the most persistent derangement of motility. In 16 cases the tongue presented a soddened appearance, and exhibited deep transverse furrows on its dorsal surface; in all these patients one is able to trace a marked physiological and psychological agreement, and so much do they resemble one another in these respects that they might readily be taken for members of the same family. Inordinate size occurred in 12 instances, and in almost every case was associated with defective power of articulation. In 2 the tongue was unusually long. 33 were mute; 16 semi-mute. In 83 the speech was indistinct. In 62 the speech was fair. Stammering was observed in 4.

Tonsils.—One cause of the peculiar speech prevailing among idiots is the condition of the tonsils. These observations for the most part were made in the summer, when the tonsils were not likely to be rendered worse than their usual condition by climatic influences. In 30 instances they were injected, in 17 slightly enlarged, in 79 considerably enlarged, and in 5 so much increased in size as to interfere with deglutition and respiration.

Mucous membrane, &c.—Besides the injection of the mucous membrane of the tonsils which has been noticed, other regions of the oral cavity are liable to this condition. The velum palati, uvula, and pillars of the pharynx were found to be thus characterized in 27 instances. The posterior wall of the pharynx was observed to be marked by considerable vascular injection in 33 cases, and in 6 the mucous membrane had assumed a granular appearance. The buccal and labial glands were generally hypertrophied, and the salivary glands were frequently enlarged. In 11 instances the sublingual gland was *greatly* enlarged. The uvula was elongated in 14 cases, bifid in 2, very short in 1, and entirely absent in 1. The lips were hypertrophied in 2. In 1 case only were the gums noticed to be swollen and tumid, a circumstance arising probably from the abundant supply of fresh vegetables with which the patients are provided.

Slavering.—The flow of saliva from the mouth is universally associated in the popular mind with the condition of idiocy. The slavering may vary in degree. It may occur only at periods of excitement, and at meal times, or with scarcely any intermission throughout the day, producing in severe cases excoriation of the chin. Amongst 325 cases which I have examined, I find 72, or 22 per cent., in which this habit was noticed. Of these, 28 slaver to a slight extent, 17 rather more so, and 26 in an aggravated degree. This peculiarity depends, I believe, on two or three causes—1st, the increased secretion of saliva; 2nd, the deformed condition of the mouth; 3rd, the want of co-ordinated movements in the muscles of the tongue; and 4th, the absence of tonicity in the labial muscles. Seeing that slavering exists in 22 per cent. of imbeciles, the question may arise—Is it confined to this section of the community? I am not prepared to say that it is never associated with mental vigour; but I believe that, excluding childhood, old age, disease of the mouth and neural lesions, slavering is very rarely unconnected with mental imbecility. Moreover, I have examined with reference to this question 1000 persons, who are doing the everyday work of the world, without meeting with a single example.

Summary.—We have thus seen that idiocy is not simply a cerebral lesion; that it carries with it marked physical deviations, of which I have shown conspicuous examples in the mouth; narrowed, arched, and unsymmetrical palates; tardily developed, irregular, and rapidly decaying teeth; a hyperæmic condition of the mucous membrane and glands; elongated uvulas and hypertrophied tonsils; large, ennervated, and rugous tongues, deficient in co-ordinated movements and in their special function; saliva secreted inordinately, and retained incontinently. Such are some of the characteristics of a class, in which mental vigour is in abeyance, which should be taken in connexion with the psychological state in diagnosis, and inculcate the doctrine, that the psychical condition of these unfortunates should be specially sought to be ameliorated by an improvement of their physical condition.

Earlswood, Redhill, Jan. 1862.

EPITHELIAL CANCER ON THE TONGUE SUCCESSFULLY REMOVED BY EXCISION.

BY E. WILLIAMS, M.D., Bracknell.

THE following case, which may be worthy of record in the pages of THE LANCET, occurred in my practice lately:—

John H——, a single man, aged fifty, applied to me suffering from a sore-throat, as he supposed, and felt as if he could not live through the night from suffocation. On examination, I found a large fleshy mass attached to the posterior part of the tongue, and extending quite into the larynx, which had slightly commenced ulcerating. I at once concluded that this must be "epithelioma."

From this man's previous history I found that he had felt as if something had been attached to the tongue, that he had had

a difficulty in swallowing for the last four months, and that his father had died of cancer. As the urgency of the case demanded instant relief, I at once removed it, with but little hemorrhage occurring, which was soon stopped by means of nitrate of silver.

The poor fellow, after the operation, felt so gratified that he almost danced for joy. The mass was about an inch and a half long, and half an inch wide. It consisted of tesselated cells, or like scaly epithelium. I ordered him three grains of iodide of iron, three times a day, one pint of bitter ale, some beef-tea, and a little wine.

The man has gone on well ever since, and the cicatrix is quite healed up. I expect the disease will return; but it is some gratification to prolong life even for a short time. Most authors say cancer destroys life in four years from the first commencement, and more rapidly when it occurs on the tongue. I intend watching this case carefully, and will make the result known in a future number of THE LANCET.

Berks, Jan. 1862.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

CHARING-CROSS HOSPITAL.

CHRONIC PERITONITIS, WITH PURULENT EFFUSION, PARACENTESIS ON TWO OCCASIONS; EXTREME LOWNESS OF THE PATIENT; RECOVERY.

(Under the care of Dr. WILLSHIRE.)

CHRONIC peritonitis is acknowledged to be a very unpromising disease in regard to treatment, and usually the efforts of the physician are confined to a mitigation of the symptoms or retardation of the progress of the malady. A cure is rarely brought about, more especially when the effusion has reached the suppurative stage. During the past summer, however, a most unfavourable case of this kind—one in which life seemed hanging in the balance for several weeks—came under our observation, but which ended in a good recovery from the means perseveringly employed to save life. There can be no doubt that, in this instance, the intestines and their peritoneal investments have become adherent; yet, with such a disadvantage, it is probable that the patient may enjoy a fair share of health in a country district.

For the notes of the case we are indebted to Mr. T. C. Wigg, late physician's assistant to the hospital:—

Ann M——, aged twenty-four, a housemaid, living in London, admitted March 12th, 1861. She states that she has always enjoyed good health until about two years since, when she first noticed a swelling of the stomach, which gradually increased up to the present time. She cannot assign any cause for the complaint; she is not aware of having caught cold nor of having had liver or heart affection. She has had a cough in the winter for the last two or three years. The catamenia had always been regular.

Upon examination, the abdomen is found uniformly distended by fluid. She measures thirty-five inches and a half in circumference. The bowels are constipated; the tongue is clean; the countenance has an anxious look, and the patient is rather emaciated. There is not any œdema of the lower limbs, nor can any particular disease of the heart, lungs, or kidneys be detected. She was ordered blue-pill and squill with the acetate of potash in decoction of broomtops three times a day, and an ointment of mercury and iodine to be rubbed over the belly. Compound jalap powder was taken occasionally, as an aperient. This kind of treatment was continued from the 12th until the 27th March, when, the circumference of the abdomen being reduced only one inch, and the patient complaining of dyspnœa and pain of the left side, and having vomited some blood, Dr. Willshire requested Mr. Canton to perform the operation of paracentesis abdominis. Accordingly, on the day last named, 240 ounces of clear serum were drawn off, after which a full dose of opium was ordered to be given.

For some days after the operation the case was an anxious one, vomiting, pain, and depression being prominent. These symptoms were met by opium, stimulants, and effervescing draughts containing prussic acid, under which the patient rallied. In a short time, however, the abdomen became of the same size as before.

As the patient was beginning to be worn out by the continual pain from distension and by broken rest, Dr. Willshire decided upon having the abdomen again punctured. Accordingly, on the 20th of April, Mr. Canton performed the operation, and gave exit to 232 ounces of sero-purulent fluid, which, when flowing, was so dense and deeply coloured as to look like pure pus. After the operation, a full dose of opium and eight ounces of wine were ordered.

For some weeks following great fears were entertained for the safety of the patient. Pain, want of rest, vomiting, and diarrhœa were the more urgent symptoms. The emaciation, too, became extreme. A small abscess formed in one of the labia, and twice a little matter collected at the seat of the last puncture of the abdomen. It was believed that some purulent matter was passed per anum, but this was uncertain. The appetite of the patient became exceedingly capricious, and her temper extremely trying to the nurses and the patients near her. Opium in one or other of its forms, but chiefly "black drop," along with alkalies and effervescing draughts, and a good supporting diet, constituted, in general terms, the regimen to which she was subjected. At this juncture a troublesome cough made its appearance, followed by muco-purulent expectoration. This, together with the extreme capillary development over the forehead, arms, back, and indeed over the body generally, and the peculiar form of peritonitis from which the patient had suffered, gave rise to some fears that pulmonary tuberculosis would prove fatal to her. But physical examination certainly did not warrant the assumption. Fortunately, the cough gradually ceased, the abdomen did not again enlarge, and the patient began to pick up a little flesh; her countenance, also, assumed, if not a cheerful, yet a less anxious expression. Improvement still continued, when she was discharged (having an order for Walton-upon-Thames) August 12th, 1861.

ST. GEORGE'S HOSPITAL.

CHRONIC PERITONITIS WITH EFFUSION, ENCYSTED BY ADHESIONS; DISEASE OF THE LIVER AND HEART; FATAL RESULT; AUTOPSY.

(Under the care of Dr. PITMAN.)

THE details of the present case are of not less interest than those of the foregoing, for although there were no active symptoms of peritoneal inflammation on the patient's admission, nevertheless the autopsy afforded sufficient evidence that it had been at one time very extensive, and had given rise to the adhesions which existed. An encysted cavity filled with fluid was firmly attached to the liver; and it is worthy of remark that, considerable as was the ascites during life, no fluid was found in the cavity of the peritoneum after death. For the notes of the case we are indebted to Dr. W. H. Dickinson, late medical registrar to the hospital.

John C——, aged thirty-five, admitted Sept. 11th, 1861. Four or five years ago he suffered from ascites and anasarca, from which he perfectly recovered, except that his legs remained œdematous. As an hotel waiter, he had indulged in tippling—principally wine, and not spirits; frequently drinking when too much occupied to eat. Two months before admission the œdema of his legs increased, and he then perceived that his belly was becoming enlarged. Both these symptoms continued to advance, until at length he became enormously distended, the skin in many places being blistered and filled with fluid. His face was sallow, and his conjunctivæ tinged with bile; his bowels open, and pulse feeble. His liver could be felt extending downwards into the abdomen. There was a loud systolic murmur, but the urine was passed quite clear; it was acid, and free from albumen. He was ordered morphine every night; this he continued to take until Sept. 18th, when a grain of opium was substituted for it, in consequence of the itching

of the skin which the former produced. The same effect was caused by the opium, and it was given up. He was now ordered quinine three times a day. During this time the swelling of the abdomen became less, and the blisters had discharged immensely.

Sept. 25th.—The compound spirit of juniper was added to his draught, and he was given gin.

For the following three or four days he was frequently sick after taking food.

Oct. 1st.—After having passed a good night, he was attacked with shivering and vomiting of greenish fluid. He was very depressed and low. Ordered a grain of opium every four hours.

The vomiting continued more or less, and on the 2nd he looked as if dying. Six ounces of brandy were ordered, and sesquicarbonate of ammonia.

3rd.—He was reported to have slept the greater part of the previous day and night, but he refused nourishment. The blisters continued to discharge largely. At midnight he again began to vomit, and did so continuously until his death, which took place at one A.M. on the 4th.

Autopsy, thirteen hours after death.—The belly was rather large, and the legs extremely œdematous and spotted with large blisters. The pericardium contained a little yellow fluid, and some easily detached patches of lymph were on the visceral layer. All the cavities of the heart contained large yellow coagula. The mitral valve was slightly thickened and puckered; the orifice was surrounded by a series of lumps of atheroma, which formed a complete ring. The left lung was wholly adherent, and congested throughout; the right lung was in a precisely similar condition; no part of either sank in water. On opening the abdomen, much difficulty was experienced in separating the walls from the intestines and omentum beneath. When this was done, the liver was observed to be very prominent, and appeared to be greatly enlarged, but not a drop of fluid was to be seen in the peritoneal cavity. The bowels were generally adherent, and the various layers of omentum were much thickened, especially that one which lies immediately beneath the anterior half of the liver. When the liver was separated from this, it was found to be so hard and prominent as to give the idea of a solid mass; but when it was cut into, a great quantity of serous fluid escaped, which had been encysted by the adhesions. The cavity in which this was contained was completely walled in in front by the great omentum and small intestine. The liver weighed 4 lb. 10 oz.; it was mottled with patches of yellow mixed with much fibrous tissue, and seemed to be in an early stage of cirrhosis. The gall-bladder contained a little black calculus, like a cinder. The spleen was large, and closely surrounded by adhesions; it weighed 2 lb. 11 oz. The kidneys were healthy. A round, cretaceous mass, as large as a walnut, was found near the surface of the right lobe; the liver was covered in the neighbourhood with old lymph.

ST. BARTHOLOMEW'S HOSPITAL.

THE INFLUENCE OF ARSENIC UPON ALBUMINURIA, IN A CASE COMPLICATED WITH PSORIASIS AND LICHEN.

(Under the care of Dr. FRED. FARRE.)

THE tonic and antiperiodic effects of the liquor arsenicalis are well known in the practice of medicine. According to Dr. Anthony Todd Thompson, it determines to the surface, equalizes the circulation, excites the cutaneous capillaries, and improves the general action of the skin. Some months back we watched with considerable interest a case of acute renal anasarca, which became complicated with psoriasis and lichen, for which this solution of arsenic was employed, and with extremely beneficial effects upon the quantity of albumen in the urine.

The patient was a female, aged nineteen years, who was admitted with acute renal anasarca of two weeks' duration, possessing all the usual characters of that affection, with the urine not only highly albuminous, but very smoky. For this condition she was ordered suitable treatment. About a month after her admission, an eruption of psoriasis appeared, associated with lichen, on the arms and hands, for which she was ordered five minims (afterwards increased to seven) of Fowler's solution, in peppermint water, three times a day. This was found to be of service, not only in dispelling the cutaneous eruption, but also in diminishing the quantity of albumen to such an extent that it had almost wholly disappeared from the urine. In two months the eruption had much diminished, and was quite cured by the tenth week; and although the albumen had all but gone, it subsequently reappeared in very small quantity whilst taking the arsenic. Besides other treatment, she had alkaline baths and creasote ointment. She left the hospital comparatively well at the end of the twenty-fifth week, being much stouter and altogether looking a great deal better. The arsenic had acted evidently as a powerful tonic, and exercised a very decided influence on the albuminuria.

LONDON HOSPITAL.

STERNAL VENOUS MURMUR IN A CASE OF SPANÆMIA AND LEAD CACHEXIA.

(Under the care of Dr. HERBERT DAVIES.)

THE notes of the following case were kindly furnished by Dr. Morell Mackenzie, registrar to the hospital:—

William S——, aged thirty nine, suffering from spanæmia, and the cachexia due to chronic lead-poisoning. The patient is a painter, and for some years has habitually handled paints containing white-lead. He once suffered from lead colic. He has a sallow, chlorotic complexion; is well provided with fat, but his muscles are soft and flabby. He is easily fatigued, and complains of a constant sense of weakness. He perspires profusely on the slightest exertion. His blood appears abnormally watery to the naked eye, but the microscope does not reveal any excess of white corpuscles. On applying the stethoscope to the upper part of the sternum, towards the right edge of that bone, and on a level with the first intercostal space, a soft but distinct continuous murmur is heard. This murmur can be easily traced down as low as the inferior border of the right costal cartilage of the third rib, where it joins the sternum, and is of a soft whistling tone. It is scarcely perceptible when the patient is in the horizontal position, but becomes very evident on his assumption of the erect attitude, and still more intensified after prolonged inspiration when the breath is held. Dr. Davies called the attention of his class to the important fact, that when the patient was directed to elevate his arms above the head the character of the murmur was completely altered, and had become so loud and roaring as almost to mask and drown all other thoracic sounds. This was caused by the increased impetus given to the venous circulation in that position. Dr. Davies observed that if chlorotic patients were more often examined in this way, and with reference to this hitherto unnoticed circumstance, the sternal venous murmur would probably be far more frequently detected. A loud venous jugular murmur can also be heard in the neck, but the presence of the continuous murmur in the superior vena cava which is elicited through the sternum is a proof that, however these bruits are produced, the theory which attributes them to the mechanical pressure of the stethoscope must be abandoned. Over the aorta there is an arterial functional murmur, traceable up the carotids. The *interrupted* nature of this bruit differentiates it from the *continuous* murmur, and proves that the latter is not arterial. The aortic bruit disappears occasionally, and when the patient elevates his arms it becomes either absolutely less loud, or relatively so when compared with the increased intensity of the sternal venous murmur.

ROYAL FREE HOSPITAL.

CASES ILLUSTRATING THE VALUE OF VALERIANATE OF AMMONIA IN THE TREATMENT OF THE MORE SEVERE FORMS OF NEURALGIA.

(Under the care of Dr. O'CONNOR.)

THE following cases of neuralgia, extracted from the case-book of Dr. O'Connor, are representatives of a large class of a similar character which have come under his care at this hospital. They illustrate the success attending the use of the valerianate of ammonia as a remedy in the severer forms of this malady. Dr. O'Connor informs us that this drug, if retained in a state of crystallization, rapidly decomposes, and is uncertain in its action. It should be kept in solution, and the smallest dose he is in the habit of giving of the latter is equal to twenty grains of the crystal.

CASE I.—J. R——, a man aged forty-six years, a porter, unmarried, was admitted Nov. 9th, complaining of excruciating pain in the right side of the face, commencing near the malar

bone, from thence extending to the nose, over the whole of the upper, and then to the lower jaw. He has been subject to the pain for ten years; it is generally most severe about eight o'clock at night, but he is never totally free from it. For the last week it has been most excruciating, and he has had scarcely any sleep. He has been under the care of many medical men, and sought advice at various institutions, without benefit. Dr. O'Connor ordered him a dose of compound powder of jalap to be taken directly, and a draught of three drachms of Bastick's solution of the valerianate of ammonia in infusion of calumba every three hours.

On Nov. 16th he again presented himself at the hospital, when he said that after taking two doses of the medicine the pain was considerably relieved, and that he had no occasion to have recourse to the remedy after the sixth dose. He is now well and free from pain.

CASE 2.—P. B——, a married woman, aged thirty-one, admitted on the same day as the foregoing; has two children. For a number of years she has been subject to attacks of neuralgia, which come on generally about five o'clock of an afternoon, and continue with great severity for five hours. The pain seizes her first behind the right ear, extends to the nape of the neck and back of the head, and frequently shoots with great rapidity along to the malar bone, then to the lower jaw; and she is suddenly seized with pain at the region of the heart. She is suffering from aortic valvular disease. At times the pains are so severe that she cannot bear the slightest blast of wind, and is obliged to roll herself on the floor. She was ordered three drachms of the solution of the valerianate of ammonia in infusion of calumba every three hours.

On Nov. 13th she was very much better; has had only three attacks since the 9th. The medicine to be continued.

23rd.—Has had no pain since the 18th.

CASE 3.—R. P——, a married woman aged forty-two; has had eight children; works as a laundress; has suffered from neuralgia of the fifth pair on the left side for nearly twenty years, and has sought advice at many hospitals with only temporary relief. When the paroxysm is most severe the pain extends to the side of the neck and shoulder; it also causes deafness. She is obliged to go to bed, and cannot take any food, the slightest motion causing intense agony. For ten years back the paroxysms have been more severe and of longer duration. She was admitted, under the care of Dr. O'Connor, on the 13th of November, whilst in severe agony; had no sleep the previous night; her health is otherwise good; and the teeth perfectly sound. She was ordered four drachms of the solution of valerinate of ammonia, in infusion of calumba, to be taken every three hours; a dose of compound powder of jalap directly.

On the 27th she states that after a few doses of the medicine the pain diminished, and on the following day it entirely disappeared.

Jan. 8th, 1862.—This woman became an out-patient from an attack of influenza. She states that since the 28th of Nov. she has not had any return of pain.

CASE 4.—L. C——, aged forty-nine, a married woman, admitted on the 20th of November. She has had nine children; has been for nearly ten years subject to severe attacks of neuralgia of the right side of the face, right eye, and the tongue. These paroxysms came on generally at eight o'clock in the morning and four in the afternoon, and as soon as she puts anything into her mouth she describes the pain as insufferable. Her health is otherwise good, and her teeth are all sound. She was ordered a draught composed of four drachms of the solution of valerianate of ammonia, in infusion of valerian, to be taken every two hours, and to be repeated oftener if the pain continues in its severity.

Nov. 30th.—She states that since the 27th she has had sound sleep every night, and the paroxysms of pain only come on once a day, and then of much milder character. The medicine to be taken every six hours.

Dec. 14th.—Has had no return of pain since the 1st, and now feels quite well.

GUY'S HOSPITAL.

HYSTERICAL MOVEMENTS OF THE LEFT ARM, CURED BY THE VALERIANATE OF ZINC.

(Under the care of Dr. BARLOW.)

SUBJOINED is an example of singular derangement of the nervous system in hysteria, manifested in continued movements of the arm and hand, persisting during sleep. As the attack was quite recent, it readily yielded to the administration of valerianate of zinc. The short notes of the case were taken by Mr. G. M. Ashforth, clinical clerk.

We may here refer to another case of nervous disorder occurring in an elderly man admitted on the 17th of September, 1861, under Dr. Wilks's care, with lateral movements of the head towards the right side. He was a worker in the manufacture of black-lead pencils (an innocuous trade so far as the nature of the substances employed in it is concerned), and had been subject to these movements of the head for some years. He has had them sometimes when asleep; they appear to come and go, and are often worse when he is examined by any person. He was rather pale, and his general health was otherwise pretty good. Under the influence of the compound iron mixture three times a day, he so much improved that he left the hospital tolerably free from them. The chemical student will at once understand that in this instance the nervous malady was not attributable to the effects of lead, for there is none of that substance in plumbago, from which the black-lead pencils are made; it chiefly consists of carbon, with a small proportion of the protoxide of iron, silica, &c.

Mary T——, aged twenty-two, residing in Tooley-street, was admitted November 16th, 1861. Has been ill four days, but had always been in good health, with the exception of an attack of typhus fever. Is unmarried, but was confined two years ago of a living child. Two weeks before her confinement she had a shaking of the hand, which went away during labour. Four days before admission, she was busy at work in haste to get it done, being a servant, when a violent shaking of the left hand and arm came on suddenly. She did not feel any pain anywhere, and appeared perfectly well. She menstruated last week, after an interval of two months; she is seldom regular in her menstrual periods; bowels are regular.

She was apparently healthy on admission, but with bad cranial development; the forehead was low and small. The shaking of the hand is excessive. During sleep the movement continued, and often deprived her of rest; she is not subject to hysterical attacks. Urine pale, normal quantity; pulse 72; heart's action irritable. With some aperient medicine, she was ordered two grains of valerianate of zinc with extract of gentian, three times a day, and medium diet.

Nov. 17th.—Bowels open five times; is better.

19th.—Much improved; heart not so irritable; sounds normal.

20th.—Hand is much quieter.

22nd.—Hand nearly quiet; can hold it out straight, with very little shaking.

26th.—Is quite well; the arm and hand do not shake at all. Discharged cured.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

MR. COULSON, PRESIDENT.

MR. MAUNDER read a paper

ON PRIMARY VENEREAL SORES; THE POSSIBLE ERRORS IN DIAGNOSIS, AND THE EVIL CONSEQUENCES OF SUCH ERRORS.

The author prefaced his remarks by assuming the existence of two chancres—the soft or non-infecting; the indurated or infecting; and suggested that, for the sake of avoiding any misconception of the terms syphilitic and venereal, the former should be applied exclusively to the indurated chancre and its sequelæ. The symptoms of a typical form of each variety of chancre, with the possible errors contingent upon each, and cases to illustrate these latter were then delineated, as follows:—The soft chancre is seated on tissues normal to the touch, being perfectly soft and supple; its margins are abrupt, perhaps undermined, and, as it were, at right angles to the surface of the sore; the surface secretes pus, is worm-eaten and fretted in appearance; it is generally multiple either at once, or by a series of consecutive inoculations; it has a tendency to spread or to become phagedænic; it is more or less painful, and is occasionally, but not necessarily, attended by adenitis; it may be contracted repeatedly; but the chief point to be borne in mind is, that it is never followed by constitutional infection. The indurated chancre is seated on tissues peculiarly hard, the hard-

ness being abruptly circumscribed (like the redness of erysipelas); its surface is smooth, just moist, the edges being bevelled off as though a portion of tissue had been gouged away; it is rarely painful, and may, therefore, exist without knowledge; it is usually solitary, and has no tendency to spread; is attended in its early stage by enlarged, indolent, and painless glands of one or both groins (provided that the sore be on the penis); they feel as nuts might beneath the skin.

Possible errors.—The character of the base in each variety may be concealed by the accession of accidental inflammation, and this being present, proper means should be used to subdue it before vigorous treatment be adopted. Irritation caused by the application of a remedial agent, such as the nitrate of silver, may lead to a deceptive induration, apparently specific. The surface of an indurated chancre, under the influence of irritation, may secrete pus and become painful, and so resemble the soft chancre. The indurated sore is usually solitary. The soft chancre is generally the source of many in the same individual. Indolent glands attending the indurated chancre usually show themselves before the expiration of many days; those associated with epithelioma not earlier than twelve months from observation of the disease. A very fertile source of error may exist in the presence of both varieties of chancre in the same individual. Of the symptoms present, the state of the base can be most implicitly relied upon, but it must be examined by the finger and thumb before an opinion concerning its nature be expressed.

Mr. Maunder concluded his remarks by supposing a case in which the soft chancre had been mistaken for the indurated. What follows? "In all probability the patient either surmises or is at once told that he is the subject of an infecting disease, which can only be relieved by submission to a long course of medicine, and then under the most fortunate circumstances he cannot be pronounced cured, because the disease may possibly show itself in one or other form at any future period of his life. This belief, being instilled into the mind of the patient by a practitioner in whom he has confidence, cannot but have a more or less depressing influence over him in proportion as his horror of syphilitic infection be great or little. This belief may seriously affect his prospects and intentions regarding the future, inducing the patient either to change his residence, his avocation, or perhaps to doom himself to single blessedness for ever; in fact, the man's hopes are blighted. Let us now turn to the practitioner. He, of course, prides himself in having treated his patient most skilfully, and believes that, because after the lapse even of some months no secondary symptom is declared, this happy result is due to the medicine opportunely prescribed by him; whereas the patient has been the victim to a misplaced confidence, has probably been subjected to the baneful influence of mercury and of iodide of potassium to cure a disease which never did and never would have existed. The course of treatment has been extended over a long period, and a long doctor's bill must be paid; but this latter the patient, it is to be hoped, does not grudge, believing that he has been most cleverly treated. And thus not only does the surgeon acquire a reputation for skill which he does not possess, but also a greater power is ascribed to the remedies used than is their due, and the patient has dearly paid for the original misfortune. It is for these reasons, gentlemen, and especially for the influence which the dread of syphilitic contamination exercises over individuals, and through them upon society, that I urge the necessity for a careful study of primary chancres, with a view to their differential diagnosis. Depend upon it we, as medical practitioners, cannot too highly estimate the value attached to, and the consequences of, our opinion expressed in a case of sore on a suspicious region, more especially as men of the world are not slow to take even a more dismal view of the possible sequelæ of chancre than we ourselves do. Consider, then, how anxiously the patient awaits your opinion, and of what a load of anxiety you can relieve him, provided that he be the subject of soft chancre only."

Mr. HENRY LEE said that Mr. Maunder had given a very clear and lucid description of the different kinds of primary syphilitic sores, and of the causes of error in the diagnosis of each. Notwithstanding all that had been said and written upon the subject, surgeons even of the present day were very far from being agreed upon the means of distinguishing different kinds of syphilitic sores. There were, indeed, some surgeons who still held the Hunterian doctrine, that a gonorrhœa might produce constitutional syphilis; others, again, distinguished clearly with Ricord that gonorrhœa was altogether different from syphilis; while others, again, as clearly distinguished between the different kinds of syphilis. Observers from all these various schools supported their opinions by reference to experiments or cases as they occur in nature. Thus we have the experiment of Hunter, who inoculated himself with the matter from a gonorrhœa (as he supposed), and produced a thickened sore, which was followed by constitutional symptoms; we have the experiments of Ricord, apparently clearly distinguishing between the two diseases, and apparently showing that one could not produce the other; and we have the experiments made more recently, as clearly proving that only one kind of syphilitic sore was inoculable upon the person that had it, and so drawing a distinction between the two kinds of syphilis. Thus those who followed Hunter might still hold that there was only one venereal poison; Ricord's disciples might acknowledge two; while those engaged in more recent experiments would believe in three different poisons,—namely, one for gonorrhœa, one for the suppurating sore, and one for the infecting sore. But if these different diseases really existed in a separate form, it might be asked what were the causes of error to which Mr. Maunder had alluded, and which were acknowledged to throw so much difficulty in the way of those who investigated these diseases. Mr. Lee believed that the most frequent source of error, and that which had misled so many observers, was the fact that up to the present time surgeons generally had failed to recognise the fact that a twofold inoculation might occur at the same time. The results of such a twofold inoculation might appear in the same patient, and unless the real cause were ascertained much confusion must follow. It had now been proved that not only were the secretions of primary sores inoculable, but also (under certain peculiar states of irritation) the secretions of persons affected with secondary symptoms. We had cases given of the vaccine lymph being taken together with some of the bloody secretion from the base of the vesicle, and a twofold inoculation being the result. In practice, a suppurating and an indurated sore were occasionally seen to develop themselves at the same time as the result of this twofold inoculation; and direct experiment was not wanting to show that the blood of a syphilitic subject inoculated upon a patient who had never had the disease would produce, first a tubercle, and subsequently a train of secondary symptoms. If then we had the blood in one case shown to be the medium through which the syphilitic poison was communicated, and in another the secretion from the surface of an exhausted vaccine vesicle, and in a third case the secretion from an inflamed mucous tubercle, what was there to prevent us believing that other secretions from a syphilitic person might act in the same way? We had, indeed, evidence that they did so act occasionally. Mr. Lee referred to a case in which a grandmother, sixty-six years of age, evidently took the disease from the lips of her own grandchild. If one fluid secretion could thus be the medium of communication, why not another? If the secretion of the mucous membrane of the mouth, why not the secretion from the mucous membrane of the urethra? A careful consideration of this subject would, Mr. Lee believed, clear up much of the difficulty which had been experienced, and the contradictions which had been maintained in the study of these diseases. If it were once allowed that the mucous membrane of the urethra could furnish a secretion (in a syphilitic subject) which could communicate syphilis, then there would be no longer any difficulty in explaining Hunter's experiment. The gonorrhœal matter which he inoculated would not certainly communicate syphilis, but it might readily enough be the vehicle of the real syphilitic poison derived from some part of the mucous membrane of the urethra. Had Hunter introduced the discharge within the urethra as well as inoculated it upon the penis, a *twofold* inoculation might have resulted. The difficulty of distinguishing the different kinds of syphilitic sores might be explained in the same way. When a twofold inoculation occurred, the characters of one action obscured those of the other. But it still remained to be explained how it was that the experiments of Ricord, and others who had followed him, had failed to establish the occasional inoculability of what appeared to be gonorrhœal matter, and the occasional twofold inoculation from a syphilitic sore. The explanation was evident. In a case where the secretion from an infecting and from a suppurating sore were inoculated at the same time upon a patient who had previously had syphilis, the secretion from the suppurating sore alone produced its effect. In like manner the discharge from the urethra of a patient previously syphilitic would fail to produce any effect when inoculated upon the same patient. In order to produce the results of the true syphilitic inoculation in either case, the secretion must be brought in contact with a system previously unaffected by syphilis. Then a twofold inoculation might occur in the case of the mixed secretions from the syphilitic sore and a gonorrhœa, and a syphilitic sore might be communicated by a discharge from the ure-

thra. M. Ricord inoculated (very properly) only those who already had the disease with which he experimented. He therefore failed to obtain those results which the observation of these affections, as they present themselves in nature, and in those previously unaffected, appears clearly to have established.

Mr. ACTON had little to add to the admirable descriptions given by the author of the paper on the two forms of sores; but he thought the time of the Society might perhaps be usefully employed in discussing the last speaker's views on contagion. Mr. Lee had spoken of three schools, that of Hunter, Ricord, and an unnamed or modern one, which, it must inferred, he wished to be called by his own name. All knew what Hunter had done for the advancement of this interesting branch of surgery; most of those present were also acquainted with the doctrines that Ricord had promulgated about syphilis; but he would put it to the Fellows of the Society, who had listened to the exposition of Mr. Lee's views, if they had been able to gather any definite notions on the subject of contagion from this self-styled "new school." He (Mr. Acton) must admit that, after reading attentively all that had been written on the question of secondary symptoms being inoculable, his opinions remained unchanged. A good deal had been said about Ricord not having experimented on virgin constitutions or healthy men. The Fellows of the Society had heard Ricord blamed for not inoculating a healthy man or woman with the virus of syphilis, and complaints were made that he had confined his experiments to the bodies of those already infected. Hence, it was asserted, the uniformity of its results. Was he (Mr. Acton) to infer that this so-called "modern school" had gone further than Ricord—had dared—had been rash enough to convey syphilitic virus to virgin subjects? Would Mr. Lee openly assert that he, a surgeon to a public hospital, and entrusted with the care of patients in a public institution, ever ventured to expose himself to a criminal prosecution for thus jeopardizing the lives of patients? He (Mr. Acton) paused for a reply. If the answer was in the negative, he would press the question—What, after all, has the so-styled "new school" done in the cause of science beyond what the French professor did, many years ago? Perhaps he might be met with the reply: We have more accurately observed what happens when an already infected individual contaminates a virgin constitution. The "new school," then, only differed in the observation and interpretation of old facts. There was, however, this further difference. When M. Ricord was performing his experiments, his facts were tested in public, in the presence of pupils and professors from all parts of the world. His experiments were not successful one day, and failures the next, but were conducted on a grand scale, which laid the foundation for his system. Had this so-called "new school" done anything of this kind? It might be in the recollection of several members that in another place—the Medical and Chirurgical Society—he (Mr. Acton) had challenged Mr. Lee, if he had any facts which he could demonstrate, to a public exhibition of them. If a child's saliva can give to a grandmother who kisses it an indurated chancre once, it can do so a second time, and he should like to see such a so-called fact demonstrated to the satisfaction of the disinterested President of the Medical Society. Until this had been done, he (Mr. Acton) must class the isolated cases that had been brought forward by the "new school" amongst those so-called facts of the mesmerists, which were believed in only until they were tested, and their fallacy detected by a competent and unprejudiced committee. The danger of admitting as facts the loosest statements could not be better exemplified than by the perusal of the paper which he handed round, headed "Terrible Effects of Vaccination." This paper had been thrown into private carriages in Regent-street, and professed to be the copy of a letter from Dr. Pacchiotti, showing how syphilis was conveyed by the vaccine lymph to forty-six children, and was addressed to the people of England by the members of the British College of Health, for the Society of Hygeists, and its object was to deter families from allowing their children to be vaccinated by the "degraded medical priesthood."

Mr. DE MÉRIC eulogized the paper, and thought that the descriptions given by the author were very accurate—the more so as the latter had alluded to several sources of error in the diagnosis of sores. He (Mr. de Méric) had found the diagnosis of the chancre with parchment induration somewhat puzzling. He had seen sores on the skin of the prepuce covered as usual with the dried purulent secretion and connected with secondary symptoms, but had failed in many instances to feel the parchment induration. Of course in doubtful cases the chain of indurated glands in the groin will aid in the diagnosis. In speaking of that chain, he would just mention that, although he almost always observed it with infecting chancre, he had before his mind three or four cases where but one gland was enlarged and indurated, the size being greater than is observed when several glands are affected. The author had passed in review the different kinds of chancres, and had described the hard or infecting chancre with great accuracy; this description applied principally to the period when the sore was full blown, with its glistening red mucous membrane, its elevation above the surrounding level, its bevelled edges, its scanty secretion, and the cartilaginous mass forming the prominence. In this stage the diagnosis was easy enough, but the difficulty was to give an opinion in the *early* stage. He (Mr. de Méric) had had cases in his practice where patients presented themselves with mere abrasions, which were at first looked upon as very trifling lesions, but ten or twelve days afterwards matters had quite changed, and the induration had taken place. The difficulty really lay in ascertaining the maximum of time which the sore may take to become indurated. The wiser plan in practice is to give a guarded diagnosis, and this conduct may be followed without any detriment to the patient, as it does not matter much whether the mercury be begun ten or twelve days sooner or later. He had noticed that the author had described primary chancres as seen upon *male* patients, but he would submit that it was especially with *females* that the diagnosis was difficult. Hard sores were seldom seen upon females, and soft ones were almost as rarely met with, so that any information upon the rise and progress of such sores was very valuable. He (Mr. de Méric) had seen mere abrasions on the mucous aspect of the labium followed by secondary symptoms, and he had observed mucous tubercles of the labia appear three or four weeks after mere irritation of the vulva in cases where he had himself examined the patients with the speculum. Such being the fact, and the majority of female hospital patients never presenting any primary sore at all, the latter being either over-looked or long cicatrized without leaving any induration, it was plain that the study of chancre in the female required still considerable attention. He would just allude for a moment to Mr. Lee's observations on contagion in syphilis. The reaction, since M. Ricord's school had been obliged to modify some of their principal tenets, had gone very far; and from proving that the secretion of secondary symptoms was contagious, they had endowed the blood, the saliva, and many other secretions of syphilitic patients, with the faculty of spreading contagion. Formerly we believed too little, now we were on the brink of believing too much; we suspected the breath of a tainted patient to be contagious, and thus were forced back to Wolsey's times. Those infecting secretions would, however, help to explain Hunter's experiment when he inoculated constitutional syphilis upon himself with the matter of gonorrhœa. If the gonorrhœal discharge came from a patient who had or had had syphilis, and if the secretions of such a patient were contagious, Hunter's case became quite clear, and we were driven to suppose that the cases of secondaries after gonorrhœa sometimes observed were connected with the same complication. He (Mr. de Méric) remembered having read a paragraph some months ago in a review of Mr. Acton's and Mr. Langston Parker's works in THE LANCET respecting the explanation just given by Mr. Henry Lee regarding Hunter's experiment. We must not run riot with the reaction, and consider every part and every secretion of a syphilitic patient capable of propagating the disease. We may, however, accept *facts*, and remember that it is now proved by actual cases that a man presenting no tangible syphilitic symptoms *may* contaminate his wife, though it should always be borne in mind that she *may* escape.

OBSTETRICAL SOCIETY OF LONDON.

JANUARY 1ST, 1862.

DR. TYLER SMITH, PRESIDENT.

THE ANNUAL ADDRESS

was delivered by the PRESIDENT, who referred in the first instance in terms of congratulation to the prosperous career of the Society. It had been in existence three years, and during that time two volumes of "Transactions," which might challenge comparison with the volumes of the older Societies, had been published, and a third volume was preparing. All the preliminary expenses incidental to the establishment of the Society had been paid, and the treasurer had a balance of nearly £500 ready for investment. The total number of Fellows was now 482, of which 82 had joined during the present year. The

Society was so cosmopolitan as to include among its Fellows practitioners in the East and West Indies, Australia, New Zealand, Constantinople, and other places in different parts of the world. During the past year the reputation of the Society had been well maintained by the papers and discussions, and the attendance of Fellows had been uniformly good. The subject of the formation of an obstetrical library was next adverted to, as a matter in which little progress had been made, but which required the future exertions of the Fellows and Council. The proceedings in relation to the proposed amalgamation of the Medical Societies were then passed in review. The points elicited at the meetings of the councils and committees, and at a public meeting of the Royal Medical and Chirurgical Society, seemed to be that our profession greatly needed the existence of some authoritative body, representing the whole profession, which should be the recognised medium of communication between Medicine and the State; and that some adequate machinery was required by which reports and decisions should be made upon prominent professional subjects. Without undervaluing the advantages of union, he questioned if any mere organization could give the profession its fair influence in matters of government. We were steadily increasing our political power and influence by the formation, under various Acts of Parliament, of a considerable body of officials who were in the employ of the State, in connexion with lunacy, coronerships, inspectors of factories, the Poor-law registration, sanitary laws, and other subjects. In the end, this must create a political life for the profession, and we should not obtain our legitimate influence, or extend the political arena, until some of our members were found in the Houses of the Legislature. He trusted the time might come when it would be considered as necessary for the legal head of our profession, namely, the president of the Medical Council, to be in Parliament as the Archbishop of Canterbury or the Lord Chancellor. It was only, he believed, in this way that the profession could obtain a political recognition. Apart from political life, no governments would refer to any particular body: they would continue, as now, sometimes to consult one college, sometimes another, or more frequently some private individual. With regard to the second point, no doubt any new means for the investigation and discussion of disputed or important points would be useful, but he questioned if the decisions of any body of men would supersede the present machinery, consisting, as it did, of discussion, contemporary literature, the medical press, and the collection of public medical opinion based upon all these. In the meetings of the joint committees of the several Societies, something like a plan of an amalgamation was proposed and in part adopted. Subsequently, the younger Societies were invited to suggest some method by which the objects proposed might be carried out. Various causes operated to prevent the accomplishment of this object. A difficulty arose with the charter of the Royal Medical and Chirurgical. Some of the older Fellows of that Society strongly opposed any scheme of the kind. In the councils of the younger Societies, a loss of independent action was apprehended. Under these circumstances, the proposed amalgamation remained in abeyance. For himself, and he believed he might speak for the Council and Fellows, there was no objection to any union which should preserve the independence and vigour of their own Society. He thought the various Societies might unite to form a supreme council, just as the colleges and universities united to form the General Council under the Medical Act. To this supreme council should be committed the duties which it was thought might be better performed with union than under present arrangements, and the expenses of such a council might be shared in common. This would be a real growth or development of the existent Societies, and not a process of mere fusion or remodeling. In any future negotiations, he thought the first step should be some understanding between the younger Societies. He would now make a few remarks on the functions performed by Medical Societies, and by their own Society in particular. Societies, as a means of scientific and practical advancement, had been brought to great perfection in medicine. There was nothing like them, either in the law or the church. Our colleges devoted themselves chiefly to the care of the student from the date of matriculation to the day when he obtained his first professional qualification. After this, the medical man was left very much to himself, and the unions of our members in Societies were the chief means of public professional intercourse. These bodies carried on, as it were, and matured the education of the practitioner, and they also promoted in a very great degree the improvement of medical knowledge. In obstetrics, the want of a Society in this metropolis had long been felt. No greater proof of this could be adduced than the remarkable success which had attended its operations. Every evil augury had been falsified, and the best anticipations of its advocates had been more than fulfilled. We had not alone the duties pertaining to all other Medical Societies, but the Obstetrical Society was the only point of union for those engaged in this department of practice. Our colleges, which were founded to promote medicine and surgery, naturally preferred these departments to midwifery. No subject could be more interesting to this Society than any matter relating to the improvement of obstetric education. He was happy to be able to state that, during the past year, the College of Physicians had completed arrangements for examining and granting a licence in medicine and midwifery. The attendance required upon lectures was less than many of them would have thought necessary; but attendance had for the first time been enjoined on clinical diseases of women, which was a step in advance. He ought not to omit to state, that in the discussions arising out of this subject, their honorary president, Sir Charles Locock, bore a distinguished part. On two occasions he came from the country, at considerable personal inconvenience, to attend the meetings of the college, and advocated the interests of midwifery with such zeal and ability as to deserve their warmest gratitude. He begged, in conclusion, to direct their attention to the present social and professional position of obstetrists. There was a tendency to consider us as specialists, against which we should all contend. We were not specialists in the sense in which the ophthalmic or aural surgeon followed a specialty. Midwifery was one of the three great departments into which the wants of society and the lapse of time had divided the profession; and if the charge of specialty was brought against the obstetrist, it might with equal justice be urged against the physician or the surgeon. It should be the aim of the Society to raise the department to which it was devoted, and to obtain the general recognition of its importance. It was often assumed that midwifery was behind medicine and surgery in a scientific and practical point of view, but this was to a great degree untenable. Well-ascertained facts, rules of action, and established principles, were the characteristics which marked the approach of any art to the exactness of science. Viewed impartially, he did not think midwifery could be considered behind either medicine or surgery in these respects. In the many dangerous contingencies met with in the practice of midwifery, there were few in which the plan of action was not definitely and clearly laid down. We were fortunate in having to wield some of the greatest resources of medical art. The midwifery forceps was acknowledged to be the most perfect and life-saving application of mechanical genius which had ever been made. No other instrument equalled it in importance and perfection. It fell to the accoucheur to dispense to mankind the blessings of vaccination, the grandest discovery within the realm of medicine. For another world-wide blessing, the use of chloroform, mankind were indebted to an obstetrician. Let us then be proud of the privileges we possessed, while we endeavoured to increase and improve them. The mistaken idea has been sometimes broached that the cultivation of midwifery, as one of the great departments of the art of healing, tended to separate it from medicine and surgery. He believed that the more perfect the three great departments became, the more assured would their union become. Who could say that the union between medicine and surgery was not more perfect now, than when surgery was in the hands of the barber-chirurgeon? Let us then cultivate the department in which we are engaged, not in any spirit of disunion, but with the conviction that the more perfect we become, the more intimate will be our union with the sister departments. No mere alliance, in which our department is treated as inferior to the others, can ever prove as real or useful as a union cemented by, and depending on, mutual respect, general advancement, and equality.

MR. SPENCER WELLS proposed a vote of thanks to the President for his address. It was an address so able, that it merited more than the usual complimentary vote (which he was sure would be carried by acclamation), and he trusted that at least one of the many valuable suggestions it contained would be acted upon by the gentlemen present, and by every Fellow of the Society. The President had shown very forcibly how necessary it is that our profession should be represented in the Legislature, and he (Mr. Wells) trusted that every Fellow of the Society would do all that lay in his power to attain so desirable an object; and many of them had the power. There were very few medical men who might not exert considerable influence in the selection of candidates for various counties or boroughs, or in influencing the views of candidates. Some

perhaps, might assist in the selection of some eminent medical man, partly retired from very active practice, as a candidate for a seat in the House of Commons. Others, who might be unable to exert such influence as this, might impress upon the mind of some other candidate the necessity for advocating a great constitutional question—one which has already been advocated by an influential section of the press—the creation of life peerages. If life peerages were to become a part of the institutions of the country, we should soon see medical peers sitting in the House of Lords beside the law lords and the bishops. Surely the venerable surgeon who was led to this room last night, to move the address of condolence to her Majesty from the Medico-Chirurgical Society, would do as full honour to the House of Lords as any lawyer or divine who now has a seat there; and many other medical men might be named, who, if they had made the large fortunes gained in the church or at the bar, might accept an hereditary title, and might now do honour to a life peerage. If the profession would really work in earnest for this reform in the general election which is fully expected between February and Easter, we might then see our profession well represented in both Houses of Parliament. At any rate let the gentlemen present do their best, and show that they appreciated the address, for which he now moved that they thank their President, by doing what they could to carry out the objects he had shown to be so desirable.

The motion was seconded by Dr. T. POLLOCK, and carried by acclamation.

ABERNETHIAN MEDICAL SOCIETY.

(ST. BARTHOLOMEW'S HOSPITAL.)

AT a meeting of this Society on the 9th instant, Mr. A. Coleman, president, in the chair, a paper was read by Mr. ELLIS, house-surgeon, on

HOSPITAL GANGRENE,

of which there had lately been several cases in the wards of the hospital. Mr. Ellis observed that of all the cases of this disease which had lately come under his notice, not one had commenced with a pustule at the margin of the wound, as generally noticed by writers on the subject. He maintained that it was essentially a local disease, not a constitutional one; and believed that local treatment, provided the patient were properly supported by nourishment, was all that was required. He placed great faith in the free application of strong nitric acid, which had been attended with the best results to the patients under Mr. Lawrence's care. One case under that gentleman, treated upon the immersion plan, had not been attended with any beneficial results.

Cancrum oris, of which he (Mr. Ellis) had lately had two very severe cases—one fatal, the other a recovery,—he believed to be very similar to, if not identical with, hospital gangrene, and to require the same treatment.

Mr. J. A. KINGDON (president) agreed with Mr. Ellis in the disease being a local one.

Mr. T. WORMALD gave an account of several cases under his care in the wards of the hospital. In one case the patient had also diphtheria. Resemblances between these diseases were pointed out. Mr. Wormald had given his patients large doses of chlorate of potash, in addition to the local treatment, with marked benefit.

Dr. Andrew, the Chairman, Mr. Baker, and other gentlemen, took part in the discussion.

Reviews and Notices of Books.

Cooper's Dictionary of Practical Surgery and Encyclopædia of Surgical Science. New Edition brought down to the present time, by SAMUEL A. LANE, Surgeon to St. Mary's, and Consulting Surgeon to the Lock Hospitals, Lecturer on Surgery at St. Mary's Hospital. Assisted by various Eminent Surgeons. In 2 Vols. Vol. I. London: Longman and Co.; Simpkin and Co., &c.

A WORLD-WIDE fame and lasting popularity were achieved by the great epitome of surgical science which Samuel Cooper presented to the profession in his Dictionary, and which, in seven successive editions, spread over twenty-nine years, he maintained, by inexhaustible industry and great ability, at the head of surgical literature in this and other countries through his lifetime. In his last edition he gently boasts that "the utility of the Dictionary to students and all classes of medical practitioners has obtained for it in this country a larger share of patronage than, perhaps, was ever conferred upon any other book on surgery, while its translation into the French, German, and Italian languages, and several republications of it in America, may be taken as proofs of its being deemed worthy of considerable notice in various parts of the world." In the score of years and more which have passed since that time, the progress of surgical science had left the Dictionary far behind the age. It had long been out of print, and although still retaining the *prestige* of its great name, was inaccessible and partly obsolete. The lapse of time had gradually so increased the labour of re-editing this encyclopædic work, that in many respects it amounted to completely rewriting the articles; and while much remained of classical truth, there was much to alter and to add. Thus the mere revision of the work which Cooper of his sole power composed has proved too great for any one modern writer, and after many announcements and much delay, the general revision of the Dictionary has been entrusted to a staff of "eminent surgeons," under the responsible direction of Mr. Samuel A. Lane. It would have been difficult to select any other editor so competent for the task as this mature surgeon and profound anatomist, whose years of experience and justly high repute as a teacher of anatomy and surgery, and solid attainments in every branch of these sciences eminently qualify him to occupy the chair of responsible editor of this great work. The editor reviews the great achievements made in the art and science of surgery since the last edition was published. He adds:

"The necessity that these new lights should be made to pervade more or less the pages of this Dictionary, and that the prolific and teeming professional literature of the last quarter of a century should be consulted on every branch of surgery, rendered it physically impossible that the editor should himself revise each separate article. He has accordingly associated with him in his editorial labours many eminent and able writers, for the most part already distinguished in the department o surgery which they have undertaken, as will be at once recognised in the following list of subjects and contributors:—Mr. J. Adams, Injuries of Head; Mr. W. Adams, Orthopædic Surgery; Mr. Ancell, Articles on Blood, Tuberculosis; Dr. Bader, Ophthalmic Surgery; Mr. Busk, Scurvy; Mr. Blenkins, Gunshot Wounds; Mr. White Cooper, Cataract; Mr. Coulson, Lithotomy and Lithotrity; Mr. Druitt, Inflammation and its Terminations; Mr. Erichsen, Aneurism; Mr. Fergusson, Staphyloraphy; Dr. Handfield Jones, Cancer and Malignant Diseases; Mr. Ernest Hart, Hydrophobia, Tetanus, Progress of Surgery; Mr. J. R. Lane, Amputations, Fractures and Dislocations, Diseases of the Rectum; Dr. M'Leod, Varix; Mr. Spencer Smith, Diseases of Bones; Dr. Snow, Anæsthesia; Dr. Tyler Smith, Articles on Obstetric Surgery; Mr. H. Thompson, Urethral and Prostatic Diseases; Mr. Thomas Wakley, Excision of Joints, Diseases of Joints, Hydrocele, &c.; Mr. Spencer Wells, Plastic Surgery, Burns, &c.; Mr. Erasmus Wilson, Diseases of the Skin; Mr. Ure, Caustics, Diseases of the Mamma."

Thus a strong staff has been formed to complete and modernise the labours which rendered Cooper so illustrious, and the result has been most satisfactory.

Mr. Lane is himself responsible for the special revision of a considerable number of articles; in fact, for all which do not bear at the close the name of one of the above-mentioned contributors. Amongst the more important of these are the articles Abdomen, Aorta, Anastomoses, Antrum, Arteries, Asphyxia, Bladder, Gonorrhœa, Hernia, and in addition to these, a multitude of smaller miscellaneous paragraphs. To the article Aorta, Mr. Lane has made some important additions. Recent surgeons of great eminence have expressed opinions adverse to the repetition of the attempts which have been made to ligature that trunk. Five cases are now on record, including the operation by Mr. South at St. Thomas's Hospital on the 21st of June, 1856. They have all been fatal, and great authorities have stated an opinion, that they always must prove fatal. Mr. Lane, however, discusses this great question in

surgical practice from a more hopeful point of view. He calls to mind the frequency and immunity with which modern surgeons have been able to open the peritoneal cavity for ovariotomy, by the adoption of proper precautions, and recommends the direct method of Sir Astley Cooper for tying the aorta rather than that adopted by Mr. South, who reached the vessel behind the peritoneum by an incision from a little above the anterior superior spinous process of the ilium, or just below the cartilage of the tenth rib. Mr. Lane then makes a very valuable observation, derived from his study of arterial anastomosis:—

"The danger attending this formidable operation, judging from the cases on record, does not appear to arise so much from the wound of the peritoneum, as from the want of adequate circulation in the lower extremities, especially on the side of the aneurismal swelling. This latter cause of failure may fortunately, in future operations, to a great extent be provided against, by applying the ligature above instead of below the giving off of the inferior mesenteric artery; by this proceeding a stream of blood corresponding to the size of the anastomosing branch of the middle and right colic arteries would be available for the supply of the lower limbs. The amount of blood entering the aorta by the inferior mesenteric artery through the channel above indicated, would appear to be a suitable quantity for the purpose of ensuring the required circulation, without distending the aneurismal sac so as to endanger its rupture. From the above considerations I am not altogether opposed to the performance of this operation where it offers the only chance of life, nor should I be greatly surprised to hear that a successful case of ligature of the aorta in the human subject had been added to the triumphs of operative surgery."

On the whole subject of anastomosis Mr. Lane is entitled to be considered one of the first European authorities, and his remarks under that head are of so great original value, that we have only to regret that they are not considerably more extended. Their application to the discussion of the ligature of the innominate for subclavian aneurism (p. 126) is an admirable instance of the application of sound anatomical science to the practice of surgery. It is remarkable, that while referring to Scarpa's treatise on Aneurism as affording the best general account of the anastomoses of arteries in relation to aneurism, Mr. Lane omits to mention the great work of Luigi Porta on this subject, which is far more extensive and accurate, and with which he can hardly fail to be acquainted. On Hernia the editor has added much that is valuable to the surgeon, and especially he has given a clear summary of the parts involved in femoral hernia. Mr. Lane does not apparently admit that apertures of the fascia cribriformis are amongst the sources of stricture; and herein we think that he is at fault. The readers of this edition will naturally desire to see what the editor's life-long experience at the Lock Hospital has led him to add to the articles on Gonorrhœa, &c. Here they will find that he has in the present volume exercised a cautious reserve; adding, however, a few practical observations to each article, and agreeing with Ricord in the opinion that the poison of gonorrhœa is distinct from that of syphilis, and not followed by syphilitic infection of the constitution.

Perhaps one of the most extensive additions to the Dictionary is that of Mr. Ancell on the Pathology of the Blood. Mr. Ancell has contributed new articles, which bear the exceedingly hard names of Cholæmia, Hydræmia, Hyperinosis, Heterochymeusis, Hyperæmia, Oxalæmia, Necræmia, Pyæmia, Toxæmia, Spanæmia, Uræmia, &c. Certainly the venerable Samuel Cooper had no notion of all these things, and would have opened his eyes widely if it had been suggested that he should include them in his Dictionary. It is, perhaps, no insignificant criticism on these, to say that no reader would be likely to consult such articles unless his attention were called to them, and that then many would turn to that page, not for the purposes of needful reference, but mainly to know the meaning of the terms. The Pathology of the Blood might, we think, with advantage have been treated with greater brevity, and catalogued with greater clearness in a practical Dictionary of Surgery.

Ophthalmic surgery has made so great advances since the time of Cooper, that the articles on this part have required great labour and considerable additions. Cataract has been revised by Mr. White Cooper. This has been in the main rewritten, and the section, "Extraction," (pp. 432-34,) is especially well worthy of perusal, as embodying in clear language the practical opinions of one of the most successful operators of the present day. The rest of this subject has been elaborately treated by Dr. Bader, whose acquaintance with the literature of ophthalmic surgery is very extensive, and corrected by a considerable experience in a large field of observation. His tendencies are somewhat too Germanic; and the prevalence of pathological details and statistical dissertation are some hindrance to the surgeon who seeks here for accurate practical surgical precepts.

The article Hydrocele, by Mr. Thomas Wakley, may be pronounced the most complete ever published on this common but troublesome affection. After a trial of the various remedies recommended for this complaint, the tincture of iodine, introduced by Sir Ranald Martin, appears to be by far the most effective.

Mr. James Lane has entirely rewritten the voluminous and important articles on Amputation, Dislocation, Fracture, and Diseases of the Anus. He has performed his task with unexceptionable judgment and considerable industry. He has drawn largely from modern literature, and enriched the articles by additions and corrections from the best contemporary sources. Thus in the article on Fracture, Mr. J. Lane draws from Rokitansky, Malgaigne (very largely), Brodie, Paget, Stanley, R. W. Smith, Lonsdale, Hamilton, and others. His interpolations are of great value as to the use of the starch-bandage apparatus in the reparation of fractures, the treatment of fracture of the lower jaw, of the vertebræ, of the ribs, clavicle, humerus, and, in fact, of nearly all the bones. No small number of injuries are described which had been altogether omitted in previous editions. These articles are, indeed, elaborately rewritten, and with a degree of care and erudition which Cooper himself could hardly have exceeded. Mr. James Lane's contributions to this edition are the most extensive of all those which are to be found in this first volume; and they are marked by much sound judgment and independent thought.

Of the rest, we may speak generally in terms of deserved praise. Mr. Erichsen's revision of the article Aneurism is accomplished with much reserve, as if, working on the spot hallowed by the labours of Cooper, an excess of veneration had restrained his hand. Perhaps more might have been excised with advantage, and there are some important points that have been too rapidly passed over. Digital treatment is barely mentioned, and flexion is unnoticed. Mr. Spencer Smith has discussed Caries in a less conservative spirit and with much ability.

The selection of Mr. Alexander Ure for the article on Caustics, of Mr. Adams for Injuries of the Head, of Dr. Druitt for Inflammation, and of Mr. Blenkins for Gun-shot Wounds, is amply justified by the manner in which they have fulfilled their tasks.

The volume now published concludes at the letter H. The articles to come, by Mr. Fergusson on Staphyloraphy, Mr. Coulson on Lithotomy and Lithotrity, Mr. Thomas Wakley on Diseases and Excision of Joints, and Dr. Tyler Smith on Obstetric Surgery, will be looked for with interest. The present volume constitutes a most valuable and necessary addition to the library of every working practitioner. It sums up, as perfectly as any cyclopædic dictionary can, the whole science and art of Surgery, as it is practised and taught in modern days by the ablest surgeons and best authorities. Immense additions to, and innumerable corrections of, the labours of Cooper have been made, and the old reputation of the work will be enhanced by the appearance which it presents under these new auspices.

THE LANCET.

LONDON: SATURDAY, JANUARY 18, 1862.

THE recent prevalence of typhoid fever, visiting, as it has done, the towers of kings as well as the huts of the poor, may have suggested to many minds a doubt as to the truth of the doctrine, that this disease is closely associated with defective hygienic conditions of our dwellings. But it would be a fatal error to conclude that the fever which has dealt so heavy a blow to our own Royal Family, and which has struck with desolation the reigning house of Portugal, is in any respect different in its origin from that fell disease which is the special scourge of those who dwell in destitution, and in the midst of the miasms which are too apt to rise around the wretched habitations of the poor. In drawing conclusions respecting the character of an epidemic like typhoid fever, it would be rash to confine our attention to the apparent facts connected with a small number of cases, or even to the epidemic history of a single year. The philosophic physician will even distrust the necessarily imperfect evidence of a life-long experience. He will trace the records of past ages; he will compare the conditions of the populations amongst whom the disease raged in former times with the conditions under which he has himself observed it to prevail; he will compare his own observations with those of his colleagues at home and abroad; he will be especially careful not to run into the seductive fallacy of deducing laws from a few cases, however clear and striking these may appear in their discovered circumstances. If we consult SYDENHAM, we learn from this unmatched observer, that in his day two-thirds of the deaths in London from all causes were due to fever; and if we read the descriptions of the state of the town at that time, with its streets unpaved and often impassable from the accumulations of filth, its houses crowded together, with projecting upper stories, without drainage, or any of the conveniences which modern civilization deems necessaries, we cannot avoid the conclusion, that thousands perished from diseases which were the direct product of the habits of the people.

The history of the Crimean campaign is but a repetition of the history of our ancestors. Under like conditions, created by the exigencies of war, like diseases and a similar mortality were renewed. And if we recognise the force of the maxim uttered by BURKE, which reminds us that foreigners are, for many purposes of instruction, a contemporaneous posterity or ancestry, we may at any moment witness amongst some of our neighbours those phases of civilization or of barbarism through which we ourselves have passed. Thus it is that we may see in the Lisbon of to-day a picture of the London of three centuries ago—universal filth and perpetual fever. Nor need we travel abroad for illustrations of a law as inexorable as gravitation. There are communities in England only yet slowly awakening to the conviction that fever is a noxious weed growing up under man's sloth. Wheresoever we find neglect of drainage, there, sooner or later, will be found the consequence of that neglect—fever. During the last autumn quarter meteorological conditions appear to have been peculiarly favourable to the development of sewage-poison. Hence have been brought to light many grave cases of hygienic ignorance or neglect which else might have slumbered some time longer. Brighton, Winchester, and other places have thus been forced upon public attention. And since it is of the utmost importance for the interest of the public health that we should not waver in our confidence in a well-proved fundamental sanitary truth, or relax in the application of the proper remedies, we have thought it useful to show that recent experience is not proved in any way to be contradictory to that experience upon which present sanitary administration is based.

How do the facts stand? Is it possible that the rich take fever in a different way or from different causes than the poor? The presumption is clearly against such an idea. If, then, it be established by large, protracted, and rigid observation, and indeed by experiment, that amongst the poor fever has been the inseparable attendant upon sewage-filth, it would be folly to assume another cause in the case of the wealthy. There is not the slightest contradiction in facts that can justify any misgiving. If we seek for an appropriate illustration, we shall find it in the history of this metropolis, where the facts have been under continuous and scientific observation. On the institution of the sanitary administration, created by the Metropolis Local Management Act, large tracts, chiefly occupied by the poorer classes, were totally undrained. The sewage accumulated under, and around, and inside the crowded dwellings, and fever raged amongst the inhabitants. The greatest activity was exerted, in the first place, in providing sewerage for these districts. The consequence has been that, steadily and *pari passu* with the abolition of cesspools and the riddance of animal excreta, fever has decreased amongst the poor. Why has it lately spread amongst the rich? The explanation is not far to seek. Relying upon assumed superiority of sanitary conditions, the houses of the wealthy have been comparatively neglected. The most erroneous notions concerning sewerage have prevailed, and still prevail. Houses built even as late as thirty years ago, or less, are generally so defectively drained, that they are constantly exposed to the diffusion of sewer-gases. Brick-drains run under the basement, whose levels are broken by the erosion of the mortar, by the tunneling of rats, and other causes. The most offensive portion of the sewage, therefore, lodges under the flooring as in a cesspool. Even where these old dilapidated brick-drains have been taken up and replaced by impermeable pipes, the evil is not removed. In many cases there is simply established a shaft which conducts the foul gases generated in the main sewers directly into the houses through chinks and traps and other faults in the house drainage. In other instances, whilst drains supposed to be efficient have been constructed, old cesspools have been overlooked. In these facts, only too notorious to the Metropolitan Medical Officers of Health, may be found the explanation of the recent prevalence of fever amongst the easier classes. The truth is, that great and beneficial as our progress has been, we have not gone nearly far enough. And beyond the private drains, there lies a great untouched evil in the main sewers themselves. These generate volumes of poisonous miasms, which steal into the best houses through house-drains and by ventilating openings in the streets. An interesting experiment has been proceeding for two years in a large and crowded district of the City, for the purpose of determining the value of the chemical action of charcoal filters on the atmosphere of sewers. Dr. LETHEBY has reported that, as far as his observations have

gone, the results are most satisfactory. In examining the charcoal after two years' work, he finds it charged not only with the sewer miasms in an alkaline form, but also with the products of their oxydation.

When thorough general sewerage, scientific house drainage, and disinfection of the sewer atmosphere shall be carried out, then, sewage poisons being fairly eliminated, we may, should fever still prevail, be in a position to doubt whether other causes of fever do not exist.

THE receipt of several Melbourne newspapers and of private correspondence of recent dates, puts us in possession of some colonial news which may not be uninteresting to the profession in the mother country. In the first place we may state, that the many endeavours made to obtain a Medical Registration Bill continue to be fruitless. Old Bills are brought forward again and rejected, and new Bills are proposed, read, and then withdrawn. One section of the profession appears resolved not to accept a Medical Registration Bill without a penal clause discriminating between the various kinds of legal qualifications existing within the ranks of the profession, as well as between qualified and totally unqualified practitioners; whilst the other division is as determined not to let any Bill pass which contains such a clause. The latter section unequivocally declares that the only distinction requiring recognition by the law is between the medical man and the quack, and that there is not any need for it to hold the scales between the various kinds of qualifications which are preferred by different practitioners themselves.

From this feeling, Dr. M'ADAM's Bill, which had been read a first time, had also been vigorously opposed. Indeed, it would appear that the strong party, which has already caused one bad Bill to be thrown out, which has forced an "examining board" to be established, and a medical school to be founded, is master of the position—viz., that no Bill shall pass containing the invidious and obnoxious clause. We need scarcely say that our own repeatedly expressed opinions concerning "a one-faculty system" must sufficiently show that our sympathies rest with this latter party. It is not the business of the State to initiate an intestine war in the profession itself, but to protect the public from the noxious frauds of the quack, and to shield the rights of the profession as a body from the mischievous encroachments of the charlatan.

We suspect that not in any place more than in Australia are the members of a laborious and worthy calling more annoyingly interfered with by a set of unqualified interlopers, and the public more impudently imposed upon. Our friends at Melbourne have, no doubt, very critically examined our own registration system, with its several advantages and undoubted failures. They ought, then, to go to their task with a useful experience, which has been purchased by their brethren at home at no trifling expenditure of time, money, and temper. Victoria is advancing in many respects so rapidly as to prove that it is fast becoming dissatisfied with possessing only the broader outlines and rougher features of a European civilization. As the colonists begin to find that there are other necessities than "sheep runs" and "diggings," they very properly encourage the more enlightened members of the Legislative Assembly to propose each session more advanced measures of governmental and social reform. Whilst this is doing, there is likewise that necessary observation and agitation of the people at large, or of the particular bodies interested, going on without the Assembly, which is so requisite for maintaining the well-being of the body politic; not the worst illustration of which supervision is the struggle made by Mr. THOMPSON and others for a liberal, as well as a definite, system of medical registration.

The Medical Committee of the Melbourne University Council has at length offered to admit gentlemen in possession of a diploma or licence from any College of Surgeons or other medical institution legally qualified to grant such diplomata, and recognised by the University, to the degrees of Bachelor and Doctor of Medicine. But such admission to titles is only through submission to a rigid examination upon sixteen subjects, and upon producing proof of having been subsequently engaged in practice for five years. Now we quite agree with those who have demurred to the fairness of the University requisitions. The test comprises, say they, nearly every element for a pass examination *ab origine*. It takes nothing for granted upon the faith of the already hardly and honourably obtained licence. It is a students' curriculum *minus* the test of matriculation. There are Latin and Greek, botany, chemistry, and anatomy in it; yet it is offered to gentlemen long engaged in practice as a sort of *ad eundem!* To such persons, however, a secondary examination should not possess the elementary and technical characters of a primary one, but ought rather to confine itself to points with which an already legally qualified man for some years in practice should be held to be familiar. The mere scaffolding of knowledge has now been long done with, and it is the finished building which should be inspected. A more liberal and sensible adjustment of the requirements in question, then, are plainly demanded.

We trust that it will some day be found that our descendants in Australia are less ready to follow than they seem to be at present that sad example of addiction to intoxicating fluids which we have so continuously set them here. Whilst there is scarcely any pauperism in Victoria in the English sense of the word, we are yet reminded that destitution exists, and there are not wanting reports in this country of the difficulties which many emigrants have experienced in "getting on" in the colony we are speaking of. But, as the editor of the *Argus* observes, with bread at 6*d*. the four-pound loaf, and meat from 2*d*. to 4*d*. the pound, with wages at rates double and treble those which are paid in the mother country, to say nothing of the facilities which exist for the acquisition of a freehold, it is difficult to imagine any part of the world more inviting to the emigrant. Yet that destitution prevails is undeniable. Why is this the case? Will the following extract help us to an answer?

"Our 'little account,'" writes the editor of the *Argus* of Oct. 25th last, "for the year 1860 with our British and foreign wine, spirit, and beer merchant amounted to £1,325,320, to which must be added Customs duties upon those articles amounting to £782,747, and about £232,000 for duty-paid tobacco and cigars; making in round numbers a total of £2,340,000. Add to this sum the importers' and retailers' profits upon the articles we have enumerated, and the aggregate sum cannot be less than £4,000,000 sterling. This is irrespective of the money disbursed by the public for colonially-distilled spirits, for beer produced in the forty breweries established in Victoria, and for wine derived from 1100 acres of vineyards."

Now, amongst half a million of people, who expend from four to five millions sterling in beer, spirits, wine, and tobacco, there must be intemperance enough to account for by far the greater part of the destitution which exists in Victoria. The colony is said to expend £400,000 a year in the prevention and punishment of crime. Prevention would be surely better attained by doing something to check the wholesale consumption of intoxicating agents than by any other method that can be devised. Here would be double economy. Money saved; misery and crime averted.

An Industrial Exhibition was being held in the colony when our papers left. One great source of attraction at it was a case of live snakes, exhibited by Mr. SHORE, the collector of the reptiles. According to this gentleman, the snakes were highly venomous, and had been collected within a mile and a half of Melbourne. He asserted also that he had discovered an antidote to the bites of the serpents in question, and which was shortly to be put to a careful test in the presence of some members of the medical profession. We suspect, like all other antidotes to the deadly venom of the serpent, Mr. SHORE'S will be weighed in the balance only to be found wanting.

The Sixth Annual Report of the Central Board of Health had been recently published, according to which, during 1860, 589 lives had been sacrificed to diseases which for many previous years held but a very insignificant place in the mortuary registers of the colony. The Report observes:—

"Though we have no means of ascertaining the ratio of death to cases of sickness in regard to the inhabitants of the colony generally, yet in England it has been computed that 28 cases of sickness occur for every death; and estimating the sick-rate of Melbourne and its suburbs according to this standard, we have 119,392 cases of illness in a population certainly not exceeding 150,000 persons."

The recurrence of scarlatina and measles in several localities had been so frequent and so severe as to cause special attention to be directed to them by the superintending inspector. A voluminous "Progress Report from the Select Committee upon "the Lunatic Asylum, together with the Minutes of Evidence "and Appendices," had been ordered to be printed by the Legislative Assembly. This Report is now before us; but we are as yet not sufficiently acquainted with its contents to be enabled to indicate its particular importance.

THE Metropolitan Board of Works have favourably received a proposition made on behalf of a Company to take the sewage of the Metropolis for the purpose of applying it to agricultural purposes. The proposal is made by the Hon. W. NAPIER and Mr. HOPE. They offer to take the *dry-weather sewage* of the northern area for a term of fifty years. A part of the scheme contemplates the cession from the Crown of about 20,000 acres of waste land in Essex, to be reclaimed and fertilized by irrigation with the sewage. By this means, all doubt as to the manner of disposing of the sewage is removed. The Company will not depend upon the will or favour of others; their material will be at once applied to the enrichment of land in their own possession. And if the scheme succeed, as it can hardly fail to do, to a great extent at least, the country will be the gainer by the accession of a new and productive territory, that will employ labour and increase the wealth of the community. The experience of Carlisle, Croydon, Edinburgh, and other places, must be conclusive as to the feasibility and advantage of thus returning to the soil, in the shape of manure, what has been drawn from it in the shape of food. We anxiously look forward to the realization of a project for rescuing from utter waste the enormous yield of the London sewers. The difficulty lies in the gigantic proportions of the plan when dealing with London. But surely engineering and agricultural science and enterprise are sufficiently advanced to overcome an obstacle of this kind.

Medical Annotations.

"Ne quid nimis."

HEALTH-OFFICERS.

A SINGULAR moment has been chosen by one of the vestry of a leading parish to propose the virtual nullification of the Public Health Act. The services rendered to the public by the district medical officers of health cannot be estimated too highly. The intelligent activity with which they have assisted in combating an impending epidemic of small-pox—their valuable services in pointing out the contaminated waters from surface wells, as also with regard to the general cleansing of slaughter-houses—the successful foray which they have made upon all the foci of zymotic diseases in the metropolis, have effected the most important ameliorations in public health. At this moment, the prevalence of typhoid, typhus, and scarlet fevers in London shows how much still remains to be done; and present suffering combines with past experience to point to the necessity of a skilled supervision of the hygiene of towns, and careful medical investigation of the sources of zymotic disease. The proposition, then, of Mr. Duff at the last meeting of the St. James's vestry, reported in the local paper—namely, that the services of the medical officer of health be dispensed with—was singularly ill-conceived. Preventive medicine is the highest boon which our profession has in late times offered to the State. It has already rendered essential benefits, but they are far from being at an end. Preventable deaths still number some thousands annually in London; and it is a curious comment on this foolish proposition that in the report of the medical officer to the meeting it appears that "the deaths in the parish are above the average."

CAUSATION OF TYPHOID FEVER.

MR. SIMON'S latest opinions on the much discussed and important question of the etiology of typhoid fever have undergone changes. In the last printed Report to the Privy Council (April, 1861), Mr. Simon thus expresses himself strongly in favour of the essentially contagious character of the disease, and its specific power of infection:—

"Since I last reported generally on the subject of typhoid fever (Report 1858) an addition has been made to the literature of that disease, by the publication (THE LANCET, July, 1859—March, 1860) of a series of papers by Dr. William Budd, of Bristol. Dr. Budd's opinions, as regards the causation of typhoid fever, are as follows:—That the fever is essentially contagious; that the living human body is the soil in which the specific poison breeds and multiplies; that all the emanations from the sick are infectious; that by far the most virulent part of the specific poison by which the contagion takes effect is cast off by the diseased intestine of the fever patient; that the characteristic affection of the bowel in the disease is, in reality, the specific eruption of a contagious fever; that the sewers and other places into which all this virus passes are the principal channels through which the fever is propagated; *that they propagate it solely in consequence of being the channels for the diffusion of this poison;* that it no more is the offspring of common sewage than mildew is the actual offspring of damp and decay; and that 'by placing two ounces of caustic solution of chloride of zinc in the night-stool on each occasion before it is used by the fever patient, the intestinal discharges may be entirely de-

prived of their contagious powers.' To anticipate some arguments which might be urged against parts of this doctrine, Dr. Budd observes, that typhoid fever scarcely ever re-attacks a person who has once suffered it; and that, 'like malignant cholera, dysentery, yellow fever, and others that might be named, this is one of the great group of diseases which infect the ground.'

"The facts which Dr. Budd adduces from his own experience and from that of other observers are, in my opinion, sufficient to prove that the contagion of typhoid fever is importable by persons who have the disease. Indeed on this point Dr. Budd's history of the North Tawton fever and its off-shoots (THE LANCET, July 9th) is more conclusive than anything previously known to me. And his arguments are also, I think, cogent to this general effect—that specially the bowel-discharges of the disease are means (yet not therefore necessarily the sole means) by which a patient, whether migrating or stationary, can be instrumental in spreading the infection of typhoid fever. Provisionally these conclusions must be acted upon in their present unqualified form. But doubtless it is of practical importance to learn, as exactly as possible, whether it is in all states and under all circumstances, or only in certain states and under certain circumstances, that the bowel-discharges of typhoid fever can effect what is here imputed to them. Typhoid fever seems to be, in its causes as in its nature, very intimately related to other diarrhœal affections."

VILLAGE HOSPITALS.

IT is satisfactory to hear of the continued success of the experiment made in the village of Cranley, near Guildford, in Surrey, in the formation of a village hospital: not a fine establishment, with a noble-looking building and a large administrative staff that eat away all the money; but a simple cottage, with half a dozen beds and one good nurse and general servant. This excellent institution was commenced in 1859 by the medical officer, Mr. Napper, working in conjunction with the clergyman of the parish, the Rev. J. H. Sapte, who is the visitor and manager, and who has generously provided the cottage. One very important feature of this hospital is that the patients pay a weekly sum, the amount of which is dependent on their circumstances, thus avoiding the pauperizing influences of a mere charity and the strain on the pockets of alms-givers. Of course some supplementary aid is required, but the expenses of this institution are so light, that a very small subscription amongst the neighbouring gentry is sufficient for the purpose. This cottage hospital, as we have said, is fitted up with six beds, and during the year ending Oct. 1861, twenty-three cases were received and treated, many of them entailing amputations and other operations of a severe character, the majority of which did well. Those who are acquainted with the working of our hospitals in large towns know that one great drawback is the impurity of the atmosphere. Persons coming from the pure air are always liable to suffer in health from the foulness of that of large cities, and patients taken from the breezy country downs do not find themselves in the happiest atmospheric conditions when transplanted into the wards of a great metropolitan hospital.

A DANGEROUS ADULTERATION.

THE frequency with which oil sold as paraffine has recently caused explosions dangerous to life, rendered it desirable for the public safety that it should be ascertained whether this fluid is explosive, and, if not, what are the oils so-called which have produced so many alarming accidents. A report this week furnished by Dr. Harley, of University College Hospital, supplies some important information. It has been already well known that paraffine oil is similar in its properties to the animal oils commonly used for lamps, that it does not give off explosive vapours, and is not itself capable of explosion at ordinary temperatures. A lighted match dipped into paraffine is extinguished. A number of adulterated oils of a most dangerous character are, however, sold in the place of pure paraffine. Naphtha and the products of coal distillation are amongst these; and if oils so adulterated be shaken, they give off at ordinary temperatures vapours which, when mixed with certain proportions of air, explode at the approach of flame. Mr. William Herapath, of Bristol, has furnished an excellent familiar rule for detecting the adulteration, dangerous or not. Let two or three drops of it be allowed to fall upon a plate or saucer, and apply to them a lighted match; if the flame spreads over the surface of the drops, the oil should on no account be used, as it will under many circumstances prove explosive. The genuine paraffine or petroline will not burn except upon a wick.

MUNIFICENCE AT LEEDS.

THE great provincial towns and centres of industry have many times put to shame the boasted liberality and energy of the Metropolis. While in London the hospitals are begging painfully for pence, which just now are doled out with a somewhat niggardly hand, so that columns of the daily papers are filled with appeals but imperfectly responded to by a few donations of a few pounds, we hear that at Leeds the munificent sum of £42,000 has been subscribed for the creation of a new infirmary there, and that this amount has been contributed by three hundred subscribers, no regular canvass of the town having as yet been made. This is indeed a splendid proof of the discriminating benevolence of our merchant princes, and the noble readiness of the wealthy manufacturing classes to expend a portion of their acquired means in useful works of charity. It is one which deserves to be widely known, as an honourable testimony to the public munificence of the inhabitants of Leeds, and as a striking example which will be fruitful in good results in the proportion that it may be imitated.

DRAINAGE OF BRIGHTON.

IT is difficult to say how strong a stimulus is needed to induce a perfectly obstinate man to listen to unpalatable arguments, change his old opinions, adopt new conclusions, and, at perhaps considerable sacrifice, make the changes consequent upon convictions newly forced upon him. This series of phenomenal transitions may probably yet be witnessed at the Brighton Town Council in the matter of the necessary sanitary improvements of that maritime *diverticulum* of London. It appears, however, that two matters bearing upon the general question of the drainage of the town have engaged the attention of the Works Committee: one as to the main-drainage outfall, the consideration of which was adjourned. "*If*," says *The Builder* very truly, "they do not soon take up the question, they will risk such a blow at the prosperity of the town as it will not soon recover from."

MORTALITY IN THE PARIS HOSPITALS.—A correspondent writes:—The late discussion at the Académie de Médecine concerning the sanitary state of the hospitals, is highly important; but the subject is not new. Some time ago, Dr. Moffat, in an able paper which he presented to the French Government, and which attracted much attention at the time, showed from statistics that, while the mortality in French hospitals is as one to eight of all the patients admitted, the mortality in the London hospitals is only one in twelve, and in the Scottish hospitals still less. According to Dr. Moffat, the Paris hospitals are much richer, better ventilated, and in every way better conducted than the London hospitals. In Paris, there are always more patients in hospital than in London, although the latter city is at least a third larger, thus showing that less serious cases are admitted in Paris; and yet it is unfortunately admitted in discussions, that the Paris mortality is greater. While the French doctors are forced to admit the great mortality in comparison to London, they seek to lay the blame everywhere but on themselves. After a careful investigation as to the state of the different hospitals, Dr. Moffat comes to the conclusion that the greater mortality in the Paris hospitals can only be accounted for by the inferiority of the medical treatment. We hope to see this part of the question discussed at the next meeting of the Académie.

THE INFLUENCE OF RAILWAY TRAVELLING ON PUBLIC HEALTH.

Report of the Commission.

III.

RESPIRATION.—Railway travelling, like all rapid movement through the air, tends to increase the amount of air inspired, whilst the rate of respiration may remain unaltered or even be diminished. Hence it is that asthmatical persons often experience remarkable relief when travelling by rail; whilst the irregularity and rapidity of the currents of air in the carriages injuriously affect those susceptible to catarrhs and bronchitis. To the same causes may be ascribed that troublesome laryngeal irritation which frequently affects susceptible persons on attempting to converse in a railway carriage going at a high rate of speed.

In order to fairly estimate the influences produced by railway travelling, it is necessary to bear in mind numerous modifying circumstances which more or less affect the respiration,—such as temperature, food or stimulants recently taken, previous hurry or anxiety, &c. The following are the results of seventy-three careful observations made by Dr. Edward Smith on a healthy person, and where the effects of these extraneous influences were carefully guarded against. The results we here quote fail to convey any idea of the elaborate and laborious experiments on which the conclusions are based. Of the seventy-three experiments, part were made when travelling on the engine and part in railway carriages of each class. They were chiefly conducted on the Great Western Railway.

Cubic inches of air respired during railway travelling.

	Cubic inches per minute.
On an engine in motion ...	615 — 840
In a first-class carriage ...	545 — 691
,, second ,, ...	656 — 714
,, third ,, ...	700 — 712

The average amount of cubic inches respired by the same person varied from 450 cubic inches when in the horizontal posture, to 500 cubic inches when standing.

The variations according to speed were found to be as follows:—

	Respired air. Cubic inches per minute.
20 to 30 miles per hour	685
30 ,, 40 ,, ,, ...	738
40 ,, 50 ,, ,, ...	729
50 ,, 60 ,, ,, ...	705

The effect of stopping the train was to produce a remarkable diminution in the amount of air respired, from 733 cubic inches to 528 cubic inches. The influence of greater oscillation was also perceptible on the respiration, the amount being increased from 681 to 731 cubic inches.

The rate of respiration varied from 13·4 to 16·5, with an average of 14·5 per minute. On an engine the average was 14·4; in the first-class 14·2.

The comparative relation of the amount of respiration under different conditions would be as follows, the horizontal position being taken as the standard:—

Quiet lying posture ...	1	*Railway (on engine)*—	
Sitting	1·18	20 to 30 miles per hour ...	1·52
Standing	1·33	30 to 40 ,, ,, ...	1.64
Railway, first-class ...	1·40	40 to 50 ,, ,, ...	1·61
,, second-class...	1·50	50 to 60 ,, ,, ...	1·58

CIRCULATION.—The influence produced by railway travelling on the circulation of a healthy person, care being taken to avoid all circumstances tending to alter the ordinary condition of the heart's action, is certainly not more than that produced by other kinds of travelling. But when the passenger does not possess this state of physical health and freedom from emotional influence, railway travelling will, *cæteris paribus*, tend to produce a greater effect than is occasioned by any other mode of conveyance.

Effect of alarm.

The frequent tunnels on one of the railways has been mentioned to us as an objection to travelling on it by persons in tolerable health, but with a commonly-shared dread of tunnels; the direct physical effect noticed by them being a sudden increase of the heart's action. This effect is secondary, for it is through the nervous system that the influence is produced. But it demands notice on account of the organic mischief which is known to result from excessive functional disturbance of the heart's action often repeated. A person of this impressionable kind (not necessarily weak or otherwise unhealthy) undergoes a succession of such small alarms throughout every journey, and often from very slight causes—the sound of a whistle, the passage of another train, passing a junction, excessive motion in the carriage, &c.; and this repeated day after day, especially when business is transacted in the interim between the morning and evening journeys, may become actually injurious. In several cases this recurring palpitation, increasing in frequency and severity, has been alleged as the reason why season-ticket holders have given up daily travelling before the expiration of their tickets.

Summary of physiological influences.

The fatigue, then, which follows upon prolonged and oft-repeated railway journeys may be considered a complex result of several influences, variously affecting the different organs of the body. It is made up of the effects of the muscular efforts to retain and restore the equilibrium of the spinal column and to keep the head balanced; of the impressions on the brain produced by the rattle affecting it through the nerves of hearing, the rapid succession of objects presented to the sight, and the vibrations actually transmitted by the movement of the carriage to the very substance of the brain and spinal cord. Let us add to this the effects of hurry and anxiety to catch trains, and the frequent concentration of mental effort required to compress business matters at the last moment into the strict limits thus imposed, and we shall find a concurrence of circumstances the tendency of which would necessarily be to produce considerable wear and tear both mental and physical. The physiological considerations on which we have briefly entered are certainly sufficient to lead to this conclusion, and the large number of instances in which season ticket holders have been compelled to desist from the practice of long daily journeys may be thus fully explained. There is strong evidence, indeed, in favour of the opinion that the privilege of country residence may be dearly bought at the cost of long daily journeys by rail.

Rapid aging of season-ticket holders.

A striking observation on this point has been communicated to us by one of the leading physicians of the metropolis. "Travelling a few years since," he says, "on the Brighton line very frequently, I became familiar with the faces of a number of the regular passengers on that line. Recently I had again occasion to travel several times on the same line. I have had a large experience in the changes which the ordinary course of time makes on men busy in the world, and I know well how to allow for their gradual deterioration by age and care; but I have never seen any set of men so rapidly aged as these seem

to me to have been in the course of those few years. This was an independent observation made without reference to any investigation then or at any future time to be carried on. The change was so rapid that it forcibly arrested my attention, and I must say that it gave me a strong impression adverse to the practice of such habitually long journeys. It is idle to say that journeys from one end of London to the other occupy as long or a longer period of time; for, as you well know, and no doubt have carefully made out, the hurry, anxiety, rapid movement, noise, and other physical disadvantages of railway travelling, are peculiar to that method of conveyance, and a railway journey of an hour, at the rate of fifty miles an hour, is almost as fatiguing as half a day's journey on the road."

In this able expression of the experience of a long life, full of opportunities of wide professional observation, there are embodied the general conclusions of a great number of physicians, from the collation of whose opinions we are forced to conclude that their individual experience has led them to similar results. It accords, too, with the views current in all classes of society.

Diminution in number of season-ticket holders.

It is to the impression thus produced by this experience and the inconvenience so endured that we may probably refer the remarkable falling off in the number of season tickets issued to the public, as shown by the Government returns. The number of season-ticket holders in England and Wales in 1859 was 35,322; in 1860 it had fallen to 30,500. Here is a diminution of nearly 5000 in the year.

Question of Life Assurance.

Those best able to decide this question by their wide experience and knowledge of the habits and constitutions of men of the world appear almost unanimous in this view of the subject. Even the eminent surgeons who have expressed themselves least strongly to us as to the effect of habitual railway travelling on healthy constitutions, find their experience lead up to this view. Thus Mr. Partridge, surgeon to King's College Hospital, states, in modification of his otherwise generally favourable experience in this matter, the following as amongst the instances with which he has met of disordered function due to this cause: "1, temporary paralysis from an overdistended bladder; 2, headaches; 3, giddiness; 4, temporary dizziness of vision; 5, inability or rather inaptitude for mental work usually." Finally, a physician, who has studied the subject of the duration of life in relation to insurance, states that he makes a rule of inquiring of intending assurers whether they are in the habit of taking such long journeys; not with an eye to the probabilities of accident, but in the conviction that the health is likely in the end to be impaired by them, and any tendency to disease to be fostered and exaggerated. An eminent actuary informs us that the attention of the actuaries of the various societies has been more than once directed to the subject.

THE HEALTH OF RAILWAY OFFICIALS.—If now we seek for further accurate information as to the practical influence of railway travelling upon the health of those constantly on the rail, it is obvious that certain results may be looked for in relation to travelling *employés* of the railway companies, and of the General Post-office, which may throw light upon this subject as it affects the general public.

Literature of the subject.

In this inquiry it might be expected that we should find a wide collection of facts, and be enabled to avail ourselves of the previous labours of others. The question is, however, one as to which our literature is almost barren, and the reliable documents on the subject are few indeed. We find that in England no literary materials are at hand for the purpose. We have to rely upon our extended personal inquiries amongst the Provident and Friendly Societies of the Railway Companies, and the kindness of surgeons who have had experience in attending their members. In addition, we have found information in the "Report on Friendly Societies," by Mr. Finlaison, and the valuable "Contributions to Vital Statistics," by Mr. Neison, (London, 1857.) In France, an active discussion has been carried on as to the health of railway servants. Monographs of interest have been published by Drs. Pietra Santa,* Devilliers,† and Duchesne, and papers have been read by Drs. Martinet, Bisson, and Cahen, at the Academy of Sciences. A species of controversy has, indeed, arisen, the official medical advisers of the companies throwing a doubt on the observations of other physicians who have described in strong terms the deterioration of the health of railway servants.

Health of French railway servants.

Dr. Devilliers, as chief physician of the Lyons and Paris Railway, availed himself of the wide field of observation open to him to analyze very minutely the diseases of the servants of the company; and, although he appears as the professed apologist of the company, his conclusions are important. Dr. Devilliers found that one-fifteenth of the drivers and firemen were suffering from affections of the brain and nervous system. The greater part of these diseases consisted of cephalalgia and neuralgic pains; amongst the latter are ranked facial and sciatic neuralgia. The most remarkable affections which he enumerates are cerebral concussion, meningitis compelling the relinquishment of labour, and 11 cases of cerebral congestion amongst 352 individuals. Diseases of the joints and muscles affected about one-fourth of the whole number of the firemen and drivers, and consisted chiefly of lumbago, spinal affections, and muscular and articular pains. Amongst the guards, breaksmen, and travelling inspectors, who are subject to the influence of active motion in the train, affections of the brain and nervous system are also described as "relatively numerous." Amongst them occur again cerebral concussion, cerebral congestions, inflammations of the brain, and a certain number of sciatic, facial, and other forms of neuralgia. Other independent observers in France have described, in language of a much more positive kind, certain affections resulting from railway travelling which they have found to exist among guards.

Dr. Martinet on an affection of the spinal cord.

M. H. de Martinet described in 1857‡ an affection experienced by travelling railway officials and engine-drivers in the following words:—"The nervous system is injured; the persons affected grow thin; the generative power dies out; the body is agitated by starting and convulsions; the intelligence is weakened. Cold affusions on the spine seem to me, in respect to treatment, to be the principal means which should be employed." Dr. Martinet was so impressed with the character of these symptoms that he described them as constituting a new disease. This paper was confirmatory, and in effect added something to the statements of Dr. Duchesne, who announced to the Academy, as the result of his investigations into the health of the railway travelling *employés*, that their health suffers from this employment in a degree proportionate to the duration of their service. "This evil influence," he says, "is shown by a notable loss of visual power; the loss of hearing; rheumatic affections, principally on the right side of the body; and finally by dull, continuous, persistent pains, accompanied by a remarkable sensation of feebleness and numbness, rendering the acts of walking and standing equally painful." It is worthy of note that these pains and symptoms of disordered innervation are especially seated in the lower limbs, and equally on the right and left sides. From the general review of evidence, however, it may be concluded that, owing to wise precautions and moderate hours of work, French railway servants suffer much less than English.

Number of English *employés*.

On the railways in this kingdom there are upwards of twenty different occupations, each a business in itself. These employ more than

* Pietra Santa: Chemins de Fer et Santé Publique. Paris: Hachette. 1861.
† Recherches Statistiques et Scientifiques sur les Maladies des Diverses Professions du Chemin de Fer de Lyon. Par le Dr. C. Devilliers, Médecin en Chef du Chemin de Fer de Lyon. Paris: Labé. 1857.
‡ Académie de Sciences, Séance du 23 Février.

100,000 individuals; and if we take the collateral employments, the opinion expressed by Mr. Stephenson, that two per cent. of the whole population derive their maintenance from railways, would appear to be rather understated.

Amount of sickness.

There is great difficulty in obtaining any reliable results from the records of the health of travelling railway officials in this country, owing to an absence of centralization, and want of uniformity in sickness and death returns. Amongst the superior officers of the companies and some of the surgeons connected with them, an impression prevails that the railway *employés* may be regarded as a healthy body. Individual notions, of course, vary greatly on this point, and we are met by contradictory opinions and series of facts. It is only by an accurate summary of large masses of facts that trustworthy conclusions can be obtained. Perhaps the largest collection of figures to which we can refer may be culled from the analytical tables of Mr. Finlaison. These figures certainly justify the observation of that distinguished actuary, that "the liability to sickness amongst the persons employed on railways is unusually great." The extent of this liability the following tabular analysis will show:—

Number of Sick persons out of each 100 *liable to Sickness.*

Age.	England and Wales.	Ordinary Heavy Labour.		Mariners.	Miners.	Railway Officials.
		Without Exposure.	With Exposure.			
20	26·62	26·47	28·69	16·89	23·23	31·
25	23·94	25·10	26·47	15 61	20 90	33·06
30	22·57	23·45	25·74	17·96	28·65	33·94
35	22·38	24·00	25·64	18·86	32 50	34·11
40	23·26	24 34	27·01	17·89	28·92	32·23
45	24·11	25·14	28·14	20·51	37·56	32 10
50	26·00	28·10	29·34	22·27	36·87	30·43
60	31·07	33·25	35·42	28·00	58·62	41·76

Perhaps this may be understood more clearly by a table in which the average amount of sickness per annum to each person is stated in days, and the relative healthiness of mariners and the general working population compared with that of railway officials.

Average amount of Sickness per annum to each person, in days.

Age.	England and Wales.	Heavy Labour.		Mariners.	Railway Officials.
		Without Exposure.	With Exposure.		
20	6·88	6·71	7·16	5·24	8·00
25	6·83	6·82	7·45	5·21	8·63
30	6·91	7·06	7·69	6··9	9·93
35	7·14	7·45	8·04	9·02	8·89
40	8·21	8·03	9·40	7·99	10·91
45	9·34	9·87	10·78	11·41	12·15
50	11·49	12·15	12·58	13·4·	15·23
60	18·73	20·36	21·78	24·55	15·45

Thus it will be seen that there is a greater number of sick persons and a larger average amount of sickness amongst railway servants than amongst either of the classes compared with them. The excess over that of the average population of England and Wales is very considerable indeed, and runs through all the ages under 60.

These figures include all classes of railway servants. In excluding all but travelling servants we are compelled to resort to individual experiences; but we find no reason to believe that the figures would present a more favourable aspect if confined to the latter class. The result of inquiries carried on amongst the travelling servants of all the great companies has been to convince us that only picked individuals are fitted for the service; and that it is amongst these picked lives that the above high rates of sickness prevail. To be able to endure the fatigue of the travelling service, a man must not only be of perfectly sound and healthy constitution, but he must begin *young*. It was stated to us on all hands that men over thirty or thirty-five find themselves unable to acquire a tolerance of the bodily and cerebral fatigue involved in the duties; and that, after considerable experience on this head, the companies have found it necessary to limit their engagements to young and healthy men. The effects produced on men who commence railway work in middle life, as described by the officials themselves, confirm an observation already quoted. They age rapidly. "They can't stand it, lose their heads, and become old men in no time," to quote the graphic words of an experienced engine-driver. This may be considered to some extent a crucial test. In the absence of figures and exact results, we avoid drawing conclusions from the isolated cases of illness communicated to us as having been occasioned amongst travelling servants by the peculiar influence of their locomotive habits, reserving these cases for a subsequent synopsis.

Picked lives.

THE HEALTH OF TRAVELLING POST-OFFICE OFFICIALS.—The following able and interesting report on this subject has been communicated to us by Dr. Waller Lewis, principal Medical Officer of Her Majesty's Post-office, whose indefatigable exertions on behalf of those under his charge are already so well known to the profession:—

"In the summer and autumn of 1859, I was requested by the Postmaster-General to investigate the effects of railway travelling on the health and strength of the various officers employed in the railway post-offices. For this purpose, accompanied by one or more of the chiefs of the Mail office, I made the journeys, both day and night, on the principal routes in England, Scotland, and Wales. I observed the officers in the performance of their several duties, and inquired minutely into state of their health before they joined the railway department, as well as into their then condition. In addition, I made, of course, my own observations on their appearance, &c., and I have, since that time, had constant opportunities of seeing and examining many of them. I made copious notes at the time, and have since added largely to these at each occasion of my seeing the officers. I examined them as to the early effects of travelling upon them, as well as upon any they may have experienced after they had become accustomed to the work. I also made inquiries amongst those who had been in collisions and other accidents as to the immediate as well as the secondary effects, if any, that resulted.

In addition to the special inquiries above alluded to as having taken place in 1859, I have been in the daily habit, during four or five years previously, and from that time to the present, of examining and prescribing for a great number of these officers. They comprise, not only those who have been labouring under ordinary illness, but also nearly all that have been injured by accidents, of which there have been, unhappily, a considerable number during the last three years.

The total number of persons employed in the travelling department of the Mail-office, when complete, is above 300, who are thus classed:—

Inspectors of Mails	5
Clerks...	47
Sorters	137
Mail Guards ... ... about	80
Acting Mail Guards ... ... ,,	30
Messengers, &c. ... ... ,,	10
	309

The clerks and sorters are occupied during the journey in sorting the letters and making various entries in writing con-

nected with this duty. While at work the greater number of them stand, although seats are provided for their use; but it appears that most of them prefer the erect posture, keeping at the same time the right hip in contact with the ledge of the sorting-table. They state that they are able to keep themselves more steady in this position than in any other. It is curious to notice a peculiar motion that all, or nearly all, these officers gradually, and I believe unconsciously to themselves, contract while engaged in the discharge of their duties. I allude to a movement of the body of a slightly swinging character, not directly backwards and forwards, nor lateral, but a compound between these, resulting in a diagonal. I imagine it must have some effect in neutralizing the jerking character of the train motion, and probably resembles in that respect the peculiar movement of sailors when at sea—the "sea-legs," as they phrase it.

The average length of the journeys of the clerks and sorters is about 170 miles; the average amount of time occupied in the journey about five hours and a half. The highest speed attained on any of the mail routes is between London and Dover. This journey is done at the rate of forty-four miles an hour, *stoppages included*. I do not know the *average* speed at which mail trains travel. The distance that mails are carried by railways is now above 30,000 miles daily.

The mail guards are employed in sorting newspapers and putting them in the bags; in tying, sealing, and arranging the bags when made up, and in working the mail-bag apparatus as the train flies by the different second and third class stations at which it does not stop. These duties require the possession of considerable muscular power by these officers, and consequently larger and stronger individuals are best fitted to discharge them. On night mails, the travelling clerks and sorters, when their regular work is not interrupted by emergencies, have about two days' rest in eight, while the guards have about two in six. On day mails a smaller proportion of rest is found sufficient. The Lords of the Treasury have also authorized a floating force to provide for the absence of officers on leave, or on account of protracted illness.

Persons best fitted for railway travelling.

From much observation amongst those now at work in the travelling post-offices, as well as from inquiries amongst those who have been obliged to give up these duties, and from information acquired from other sources, I am convinced that, *cæteris paribus*, tall persons are most influenced by this kind of locomotion. I conceive that it is so easy to account for this fact, that I need not here give the reasons for it. A person of full habit of body, with a bounding pulse, is much less fit for travelling duties than a more wiry individual, with little superfluous fat. I should be inclined to reject all candidates for travelling clerks and sorters who exceed 5 ft. 9 in. in height, or who weigh less than 8½ stone, or more than 10½. I find, generally speaking, that officers who commence these duties at an age exceeding twenty-five are less able to endure them continuously than those who have begun them earlier. All candidates applying for travelling appointments are subjected, as part of their examination, to the test of the dynamometer, and I usually reject those who cannot exert a pulling power of at least 250 lbs. One of our mail guards, when in health, lifted easily 550 lbs.; but a few weeks after receiving a rather severe concussion in a collision on the railway, it was with great difficulty he could raise 450 lbs., although he was then convalescent.

Effects of different gauges.

I am convinced, from the most careful and repeated inquiries into this point, as well as from personal experience, that the narrow-gauge lines exert a greater influence on such persons as are liable to be affected by railway travelling than those constructed on the broad-gauge principle. The greater, also, the speed, the more injurious are the effects on persons so liable. There is more vibration and more oscillation at a high speed than when the train is moving more slowly. While personally carrying on the investigations above alluded to, I have sometimes been so shaken as to have experienced considerable difficulty in preventing the act of vomiting. The oscillation has at times been so great that I have been quite unable to stand steadily without holding on by some fixed body. The oscillatory motion is most strongly experienced when going rapidly over sharp curves on the narrow-gauge lines. It occasionally gives rise, in persons unaccustomed to the movement, to temporary giddiness and sickness, and has a tendency, after some time, to disorder the functions of the liver and stomach. Indeed, the effects are very similar to those experienced by many persons when on the sea in a steamboat, but in a minor degree. The liability to be so affected is much increased if the journey is taken with a full stomach, more particularly, as is not unfrequently the case with passengers by railway, if the meal has been hurriedly swallowed.

Influence on healthy persons.

Railway travelling, as might be anticipated, is found by experience to affect different individuals very variously. On those persons who have good constitutions, are free from tendency to hereditary or other disease, and are physically well adapted to bear fatigue, this method of locomotion, even when persevered in for many years, appears to have but slight, if any injurious effects. Some of our officers in this department have been in the daily, or rather nightly, habit of railway travelling for periods varying from ten to eighteen years, without their health or strength apparently suffering in any degree. Some had travelled every night consecutively for three or four months together. One had been on the railway every night during a period of six months, not omitting Sundays. I could not discover that he had suffered from this long continued and severe labour, although he complained of being weaker than he was before. Another had travelled sixty-four miles every night, with two exceptions, for the long space of ten months, and made no complaint of the state of his health. I must add that the authorities of the department did not know of these cases of continuous duty, and that in some of them this unusual amount of travelling arose from the desire of the officers to increase their emoluments. Such facts, having once come to my knowledge, and having been reported to the Postmaster-General, will, as far as possible, be guarded against hereafter. Indeed, the plan now about to come into operation ensures, under ordinary circumstances, due rest to every clerk, sorter, and guard in the department.

Not only does railway travelling seem to have no injurious effects on some persons, but I have much evidence tending, apparently, to show that it is sometimes absolutely beneficial.

It has been part of my duty to examine very recently some sixty or seventy of the travelling sorters, for the express purpose of reporting as to their physical fitness for railway duties after they had undergone a probation varying from six to eighteen months. Several, however, of the officers so examined had been acting as mail guards for a much longer period. In reply to my question of how they found the travelling agree with them, some stated that they had never been so well in their lives. A considerable number replied that they had not had an hour's illness since they had commenced railway duty.

Another effect of railway travelling on certain constitutions is curious, because it is just the reverse of what might have been expected. Young men, previously extremely thin, are found rapidly to gain flesh, and to become as fat as they were before lean. These instances are by no means so rare as to be deemed mere exceptions. The converse also holds true. One of our best officers states that he has no doubt that during the period of twenty years that he was engaged in railway duties, he travelled, on an average, a hundred miles a day, Sundays included. All this time he not only enjoyed most excellent health, but he was stouter and stronger than he has been since leaving that duty.

It is very probable that these facts may partly be accounted

for by the large amount of time spent in the open air of the country, and partly by the stationary character of the employment.

Experience, however, shows that even perfectly healthy and strong persons are affected by railway travelling if their habits become irregular, and if they do not take a due amount of rest.

Influence on the unhealthy.

While, as I have said, the great majority of *well-selected* individuals can undergo railway travelling for many years consecutively with impunity, others, who are more weakly and delicate, or whose physical conformation is not adapted for receiving a constant succession of slight concussions,—the effect of railway locomotion,—suffer more or less severely. The ill effects experienced by such persons depend, of course, upon the peculiarities of their constitutions and the nature of their diseases. In persons inclined to be bilious, sickness, or at any rate nausea, giddiness, and loss of appetite, are the constant effects. Usually these symptoms do not come on until the termination of the journey. This is probably due to the different conditions of the circulation in the brain while travelling and when at rest.

At other times sickness is present during the journey. One of our clerks was obliged to resign from this cause. His sickness did not appear to diminish by time. I have known some persons who cannot ride, even in a first-class carriage, without nausea and slight faintness.

Tall, thin, weakly-made persons complain of pain and stiffness, sometimes amounting to cramp, in the knees, legs, and spine. This is particularly the case with those who stand during the journey. I have found these effects much diminished by supplying for the use of our officers elastic caoutchouc mats, which intercept nearly all the vibration. A marked difference is experienced when one foot is placed on the bare floor of the carriage, while the other rests on the elastic mat.

In consequence of the extreme difficulty—hitherto amounting to an impossibility—of duly regulating the ventilation and temperature of the carriages in motion, all diseases of the lungs and air-passages are much increased in severity and quickened in their progress by the dust, draughts, and extremes of temperature incidental to railway travelling. In summer these vehicles are sometimes insupportably hot, especially, as is often the case, when they have been exposed to the direct rays of the sun, before the train is made up. In winter, on the other hand, they are often intensely cold, especially during a severe frost. No attempt is made to diminish this inconvenience, further than by supplying hot-water tins to some of the first-class passengers.

I have found that carriages built with a double roof have the effect of moderating the excessive heat in summer and the severe cold in winter. The manager of the Bristol and Exeter Railway Company placed at my disposal a carriage so constructed, during some official journeys I made two or three years ago. I was much pleased with the increased comfort caused by the false roof, as, in addition to the improvement of the temperature, it appeared to lessen in some degree the great noise produced by the motion of the train, particularly while passing through tunnels.

Previous to my connexion with the Post-office, some officers suffering from phthisis in its first or second stage had been appointed to the travelling department. In every instance that has come to my knowledge this duty hastened the fatal development of the disease, sometimes to the conviction of the sufferer himself.

Disease of the heart, its valves, or its great vessels, wholly incapacitates for railway locomotion.

I do not, however, find that patients suffering from simple rheumatism are the worse for doing clerical or sorting duties in the railway post-office. Probably the protection from wet accounts for this fact.

One officer, of a highly nervous temperament, was very properly recommended by his medical attendant to resign his travelling appointment, on account of unmistakable premonitory symptoms of paralysis. Invariably after each journey frequent starting and involuntary movements of the limbs came on. In walking, he planted his feet vaguely and uncertainly. When he wished to take a paper or other object in his hand, he could not do this deliberately and quietly, but felt himself compelled to snatch at it, and then sometimes missed it. His sleep was much broken, and afforded him but slight refreshment. While sleeping, he constantly felt the jolting of the train. He states that he lost so much flesh that he was reduced to a skeleton. He was obliged to give up the travelling after a trial of three or four months. He was then twenty-six years of age. Several years have passed since he left those duties, and although he finds it necessary to be very careful in his habits and diet, he has had no threatenings of paralysis from that time.

Two other officers were forced to resign from the occurrence of actual paralysis. As I did not know these gentlemen personally, I am unable to give any opinion as to how much of the disease was to be attributed to the travelling, and how much, if any, to predisposition, or other causes. One of them died subsequently of disease of the brain, the other is pensioned, and is still living.

Reading in carriages in motion.

From my own experience I do not find that much mischief is occasioned *to the sight* from the practice of reading or sorting letters in a moving carriage. If the latter practice be at all injurious to the clerks and sorters, it must arise, I believe, from their working by strong artificial light. But there is no difference in regard to this while discharging similar duties in a stationary office. There is, however, one practice or habit, connected with this subject, indulged in by some railway travellers, especially non habitual passengers, which is certainly injurious, and should be avoided. I allude to that of allowing the eyes to rest on external objects *near at hand*, such as the telegraph posts and wires, near trees, hedges, &c. This produces a mischievous effect on the eyes, and secondarily on the brain. There is comparatively little harm in looking at distant objects, which do not apparently flash before the eyes with the lightning-like rapidity of things that are near to the carriage. Everyone must have observed the effect of this practice on himself. It causes almost a temporary blindness, followed sometimes by giddiness.

Accidents, and their primary and secondary effects.

During the time that I have held the appointment of medical officer to this department, there have been several collisions and accidents of other kinds in which mail trains have been involved. Although a considerable number of our men have been more or less hurt by being thrown upon the floor of the carriage in which they have been engaged, I am glad to say that these accidents have been attended in but one instance with a fatal result. In nearly every case the injury received has been concussion of the head, spine, or nervous system generally. In most cases this has been of a slight and fugitive character; in some, the symptoms have been more permanent.

The fatal case to which I have alluded was of an extremely interesting and instructive character. The man was hurled to the floor, together with some of the other officers engaged in their duties in the office. I visited him and the others very shortly after the occurrence of the accident. He assured me that he was not at all hurt, but merely shaken; and added that he intended to resume his duties at eight o'clock the same evening. Although neither the pulse, the eye, nor the countenance showed any symptoms of serious mischief, I refused to allow him to return to duty, and, much against his own inclination, kept him quietly at home for some days—I think five. At the expiration of that time, as he had had no head symptoms, and the slight soreness he had admitted had disappeared, and as he had slept well, I allowed him to resume his work. For about three weeks he continued his duties, feeling no effect

from his accident, except, as I afterwards learned, occasional slight headache during the last three or four days. At the end of that time I was requested to see him, as he was very ill and in bed. I visited him within an hour or so, and found him in a state of coma. He died the following day, from serous effusion on the brain. A post-mortem examination was made, and no visceral or other disease was discovered to account for the cerebral affection.

One other serious and interesting case of concussion occurred in a large heavy man, who was thrown down with considerable violence. Severe head symptoms rapidly came on, and although the most appropriate counter-irritant and other treatment was at once had recourse to, and judiciously persevered in, delirium and loss of power of self-control were amongst the early consequences. He required continuous watching that he should not do himself an injury, as he attempted this on three or four occasions. I am happy to say that this case, although it occasioned considerable anxiety for many months, terminated in almost perfect recovery.

Nearly all the other cases of accident from collisions have resulted in the nervous system being shaken, and for a time, sometimes considerably, weakened. There has been a great similarity of symptoms in nearly every case. Disturbed and diminished sleep, frequent starting when dozing, dreams of collisions, noises in the ears, feverishness, feeble pulse, much pallor, or, on the contrary, frequent flushing, and constipation have been the symptoms common to almost all the cases of collision. In one case, tympanitis, lasting several weeks, showed itself. But these symptoms usually disappeared in periods varying, according to their intensity, from a few days to four or five months. In a few cases there has been some amount of debility and nervousness left behind, and in still fewer, loss of flesh, which sometimes has not been recovered for a considerable period. There is another symptom common to most of these cases of injury from concussion—namely, that the individual who has suffered thereform is intolerant of railway motion for some little time after. When he is fit to resume duty, I generally recommend that he begin by taking short journeys at first.

With the object of preventing mischief to the officers engaged in the post-office carriages in case of collision or other accident, every sharp angle of woodwork in the interior of the carriages has been or will be rounded off, or done away with. Every hard portion of the internal fittings against which the officers might be thrown has been guarded with well-padded cushions. Every hook used for suspending the mail-bags has been either sunk in the woodwork or defended by a padded bar. All possible precautions have been taken to prevent mischief, and much benefit has already attended these alterations. Some attempts have been made at ventilation; but these have not been attended hitherto with the success I could wish. The post-office carriages differ much from those used by passengers. They are not divided by partitions, but are saloons, varying in length from twenty to twenty-seven feet.

Recommendations.

It will naturally be supposed that my attention cannot have been so much directed to the subject of railway travelling without having given some thought to the means of preventing or mitigating some of the inconveniences I have described. This is certainly the case, but I have considerable diffidence in making any suggestions on this point, as they are more in the province of the railway engineer or the carriage builder than in that of the sanitary physician. Still there are two or three that I think it right to allude to, as I cannot doubt that they could meet with easy application at the hands of a good practical engineer.

I am of opinion that springs could be constructed which, without weakening the attachment of the carriage to the frame, would prevent much of the vibration that, in my opinion, is one of the principal evils of railway travelling.

Cannot the carriages themselves be kept lower, so as to do away with some of the oscillatory movement?

Can no means of ventilating the carriages be found that will allow of the entrance of a sufficient supply of air, without creating thorough draughts or admitting the blinding dust and ashes from the furnace of the engine?

Conclusions.

The conclusions that I have come to from much observation are, amongst others, as follows:—

1. Railway travelling has little, if any, injurious effect on healthy, strong, and well-built young persons, if the amount be not excessive, and if they take moderate care of themselves.

2. Persons who take to habitual railway travelling after twenty-five or thirty years of age are sooner affected by it than those who begin earlier.

3. The more advanced in life a traveller is, the more easily is he affected by it.

4. Weak, tall, loosely-knit persons, and those suffering under the affections I have indicated, should, if possible, avoid this practice.

5. I am much inclined to believe that those who travel only occasionally, at uncertain intervals, or even as frequently as four or five times a week, are more obnoxious to the effects of railway travelling than those who, like our own officers, or the *employés* on railways, make it the special business of their lives. The constitutions and bodies of the latter seem to adapt themselves to the circumstances.

I must be permitted to append "a rider," by way of caution, to all these remarks. It is to the effect, that our experience of railway travelling is not sufficiently great to enable any person to state positively the *ultimate effects* of this new habit on the constitutions or health of the mass of people who thus travel."

DESCRIPTIONS OF NEW REMEDIES

INTRODUCED INTO THE PRACTICE OF MEDICINE, WITH THEIR THERAPEUTICAL EFFECTS.

No. III.

A CONSIDERABLE proportion of the remedies relied on in the practice of medicine consists either of crude vegetable substances, or of preparations of which they are the basis. It is notorious enough, that plants and parts of plants—whether leaves, flowers, seed, stem, fruit, bark, wood, or roots—are liable to great variations; but it may, we think, be questioned whether this fact has been duly appreciated as the source of diversity of opinion respecting their therapeutic value. One practitioner obtains samples of a root, a bark, or other vegetable production, and in his experiments finds it of great value and efficacy. He is followed by another, who, with equal care, employs what he considers the same thing, and pronounces it inert. Relying upon the knowledge of persons employed in gathering plants, it not unfrequently happens that one species is substituted for another bearing a close external resemblance to it, but perhaps entirely devoid of its medicinal properties. When this error is impossible from the obvious botanical characters of the species, we find plants of the same species varying greatly in the amount of certain principles they contain, according to the soil, locality, or the climate in which they are grown; and even when growing in the same place, they are greatly modified by the seasons. Thus the Cannabis Indica, to which in the east such remarkable effects are ascribed, has very different powers, according as it is derived from the hills, or grown in low marshy situations; while the same plant in our own climate scarcely manifests any of its peculiar properties. Opium, in a very wet season, yields scarcely any morphia, and different samples vary in the pro-

portion of anarcotin they yield from 1·30 to 9·36 per cent.; the cause of this latter fact is not, so far as we know, explicable.

Many medicinal plants are reared by cultivation, from the large demand for them. In some cases, this seems to improve, in other cases it greatly diminishes, their powers. The great diversity of opinion respecting taraxacum has been attributed to the use by some practitioners of the plant collected from its wild haunts, while others have employed that produced by cultivation. The great modifications in the esculent character of plants effected by cultivation are familiar to all persons; that their properties and powers as therapeutic agents should undergo similar changes, may readily be believed.

Again, the time of gathering, and the method employed in drying plants, affect their value. In every individual, these circumstances should be accurately defined. We doubt whether such general rules as are prefixed to the old Pharmacopœias, for dealing with all leaves, roots, barks, stems, &c., are proper; they may be applicable to some, but are certainly erroneous when applied indiscriminately to all. Some roots, stems, &c., if dried artificially by heat, have their volatile and active principles dissipated; others require to undergo an undefined process of fermentation or maturation, something similar to the ripening of fruits after being gathered. Some rapidly deteriorate by keeping—thus dulcamara soon becomes inert, as also does veratrum viride, cimicifuga, squills, &c.; others require to be kept some time, even years, before their full remedial powers are developed. Manna becomes more actively aperient by keeping; oak bark goes on improving for four or five years; madder is never used until it has been kept for two years, and improves for two or three more. Tobacco, which has always to be partially fermented, improves in flavour by age, as also do coffee and tea.

A pertinent example of the bearing of such facts as the above, is to be found in THE LANCET of October 12th, 1861. Mr. H. Thompson, speaking of Triticum repens, says: "It should be gathered in the spring before the leaves appear. The stem is then to be slowly dried without artificial heat, and cut into short lengths. The infusion obtained from the plants so treated, is superior to that made from plants gathered indiscriminately at any time, and also to the infusion made from the Triticum repens which is imported into this country by the herbalists, for the purposes of French pharmacy."

The bark of the larch, greatly extolled by some writers in muco-purulent diseases, is said by Dr. Stenhouse to be often wholly destitute of its active principle, and consequently inert, without any external indication of the difference.

We fear it must be admitted that the greatest uncertainty attaches from these causes to indigenous plants. On the continent and in America, organizations exist of qualified persons for collecting and preserving plants for medical purposes, and very many plants are imported. In the case of a few articles, the external and palpable characters of imported drugs, which give them the highest commercial value, indicate also their efficiency as medicines, but in the majority, the external appearance cannot be relied on; and it is much to be apprehended that the old and deteriorated stocks of the foreign herbalists find their way into the English markets.

With respect to preparations of crude vegetables, a time will probably come when most of those now in use will be discarded. More precise therapeutic observation will demand the separation of the active principles of plants, under definite chemical characteristics—a proceeding, indeed, in which great progress has already been made. Our pharmaceutists are actively and well engaged in this field, and their labours also show us in how many cases uncertainty attaches to preparations such as extracts, decoctions, tinctures, &c., from imperfect processes, and from changes occurring in them by keeping. In some cases, it has been found that the part of a plant chosen is not that in which its active properties reside; and although by crushing the entire plant an extract is obtained of some worth, it would be far better to discriminate the several qualities of its seeds, flowers, leaves, or root. We trust these hints will not be without value in the advance of therapeutics now inaugurating, and we would suggest to those practitioners who employ any indigenous or naturalized plant for special purposes, to be very explicit in noting the exact circumstances under which they find it useful in their practice.

CIMICIFUGA RACEMOSA.

This plant, vernacularly known as *black snake-root*, or *black cohosh*, is also variously designated by botanists *cimicifuga serpentaria*, *actæa racemosa*, and *macrotys racemosa*, illustrating the extreme inconvenience of the habit of multiplying terms to designate species of plants. It belongs to the natural order *Ranunculaceæ*. The root under the title of black cohosh has long been sold by English herbalists, and, as appears from the statement of Prof. Bentley, has often been substituted for the root of the black hellebore. The Professor asks, "May not the uncertain action of the once celebrated purgative, black hellebore, be due, in some degree at least, to this admixture, or substitution of spurious roots? A sample of black hellebore root, obtained from one of the first wholesale houses in this country, was wholly composed of false roots., closely resembling in appearance, structure, and chemical reactions, those of *actæa spicata*.....I have reason to believe that the substitution of cimicifuga racemosa for, or admixture with, true hellebore root, is by no means uncommon in this country."

We must refer our readers to Mr. Bentley's excellent paper for a botanical description of the plant, and the mode of discriminating between the two roots which so much resemble each other. Even when the true root is obtained for experiments, it must be remembered that it becomes greatly deteriorated by long keeping.

The root of the cimicifuga has been extensively employed in medicine in America by regular practitioners for forty years; and it is in great favour with herbalists, and the class designated "eclectics." Its recent introduction into British practice by Dr. Simpson, of Edinburgh, will probably ensure its admission into the new National Pharmacopœia. The action of this plant on the system in health presents nothing special or remarkable. In large doses it induces nausea, vertigo, dimness of sight, and vomiting. In moderate doses it produces very slight narcotic and eliminative effects. But in morbid states of the nervous system, whether painful or convulsive, it exercises a decidedly sedative action, and the eclectics assert that it has a special influence upon the uterus.

Dr. Simpson says, "I have found it in my own case repeatedly cure an attack of lumbago with wonderful rapidity." And again: "In a case of anomalous and severe chorea of long standing it was given with excellent effect; the patient had been previously treated, both in France and this country, with zinc, iron, arsenic, and all the usual remedies employed in this malady." This is all we have of his personal experience, but Dr. Simpson reports the private communications of some American physicians, to the effect that it is of great value in acute rheumatism, cutting short the disease before the eighth or tenth day; the drug acting as a simple antidote to the rheumatic poison, and curing without diuresis, diaphoresis, or any other discharge. "However unlike rheumatism and chorea may look to the superficial observer, yet the able investigations of Dr. Begbie and other pathologists have fully shown that an analogy, if not an identity, exists between the blood poison which produces rheumatism and that which produces chorea."

Dr. John King claims the merit of discovering the value of the cimicifuga in acute rheumatism; and to this we have the testimony of so many physicians, that it is impossible to suppose there can be any mistake in the matter. A recent report from a metropolitan hospital of upwards of four hundred cases of acute rheumatism states that the duration of the disease was forty-nine days. Surely, if a remedy claiming to have the power to cut the disease short on the eighth or tenth day be at hand, it ought not to be ignored or neglected.

The mode of exhibition also is the same with all who have recorded their experience. A saturated tincture, prepared thus: root of cimicifuga, four ounces; diluted alcohol, sixteen ounces; macerate for fourteen days, and strain. The dose is from half a drachm, repeated every two hours, to two drachms or more, until its effects on the system are manifested—i. e., nausea, some degree of vertigo, and lowering of the pulse. It should be begun as early as possible after the attack, and continued for several days. No especial effects on the secretions or excretions need be looked for.

For chorea it has been in use upwards of thirty years, and its efficacy is attested by a host of practitioners, many of whose names are known in the history of medicine—Drs. Physick, Jesse Young, Lindsey, Kirkbride, Otto, and lastly Dr. G. B. Wood, who states that he has exhibited this medicine in chorea with complete success. It certainly has a great advantage over many substances employed against this disease—namely, it is quite innocuous.

In uterine affections, the eclectic physicians assert that cimicifuga may be advantageously substituted for ergot, half a fluid drachm of the tincture given in warm water every fifteen or twenty minutes seldom failing to rouse the action of a torpid uterus. Dr. Wood tells us he has seen the happiest effects from it in periodical convulsions connected with uterine disorders. Others speak highly of its power in hysteria, dys-

menorrhœa, phlegmasia dolens, and all cases attended with nervous excitability, pertussis, infantile convulsions, &c.

In phthisis, bronchial affections, epilepsy, or dropsy, it is not so easy to see how its use can be beneficial, if, as is alleged, it manifests very slight narcotic effects; yet many persons have commended it in these diseases. We apprehend its use in these cases demands further evidence.

Besides the tincture, other preparations of this plant are presented to our notice: a fluid and dry extract, decoction, infusion, &c. They seem to be inferior to the tincture, but a preparation alleged to contain all that is valuable of the plant in a concentrated form, under the name of *cimicifugin* or *macrotin*, is found in commerce. It is one of a class of preparations having a very wide acceptance in America, and which are rapidly spreading in this country. It is our intention to devote one or more papers in future numbers of THE LANCET to these preparations.

BRIEF NOTICES OF AGENTS, PRESUMPTIVELY POSSESSED OF REMEDIAL PROPERTIES, REQUIRING FURTHER EXPERIMENTS.

MIKANIA GUACO.

This and many other plants have been employed as remedies for the bite of poisonous serpents. It was noticed for this purpose by Humboldt and Bonpand. South American practitioners have commended it as a febrifuge, anthelmintic, and a prophylactic in epidemic cholera and diarrhœa. They employed the leaves, but the root has for a long time been sold by English herbalists. Its properties are impaired by drying and long keeping. Spanish physicians recommend it in chorea, rheumatism, and sciatica, and as a tonic in convalescence from bilious fevers.

Recently, Dr. Pritchard, of Glasgow, has stated that he finds it a remedy for gout, giving relief in every case of "well-diagnosed podagra." He gives a tincture:—Guaco-root sliced, five ounces; proof spirit, two pints: macerate fourteen days, and strain. Dose, half a drachm to one drachm, largely diluted with distilled water, every four hours (i. e., eight ounces of water with each dose.) He also applies the tincture locally, by means of a saturated sponge or flannel.

The guaco has also been recommended in chronic rheumatism, both internally and externally; and in bruises, sprains, and atonic deafness. Should Dr. Pritchard's commendation lead to its being employed by British practitioners, we shall be happy to receive and record the results of their experience.

DATURA TATULA.

The employment of datura stramonium in asthma, in the form of cigars, is well known. The datura tatula differs from stramonium in having a dark-reddish stem dotted with green, and purplish flowers striped with deep purple on the inside. The stems of stramonium are green, the flowers white. By some botanists they are regarded as merely varieties, by others as distinct species. The leaves of the datura tatula have been made into cigars, as well as those of stramonium, and have been by some persons regarded as more powerful and efficacious. We are not aware of any direct or trustworthy testimony to this assertion. Even if it be a mere variety of stramonium, it does not follow that it may not be more useful as a remedy. With variation in colour, &c., the plant may vary in remedial power.

CARBOLIC ACID.

Hydrated Oxide of Phenyle: a product of the distillation of coal-tar.—This substance, according to Dr. Crace Calvert, may now be obtained in any quantity, in a state of purity, and at a moderate price. As a chemical agent, it is a powerful antiseptic and antiferment, arresting putrefaction, the lactic fermentation, and the conversion of tannic acid into gallic acid and sugar. Experiments are now proceeding to ascertain whether it possesses the same power respecting alcoholic, butyric, and acetous fermentation. On these grounds it has been recommended for experiment as a remedy, and it has been used in several cases in the Manchester Royal Infirmary: by Dr. H. Browne in chronic diarrhœa; by Dr. Roberts in cases of vomiting and dyspepsia, attended with pain after eating; by Dr. Ransome, locally, for ulcers and offensive discharges; and by Dr. Thos. Turner in gangrenous sores, and fetid discharges from diseased bone. In all cases it is alleged to be very beneficial. The dose is one drop in solution. For external application, one part of the acid to seven parts of water is the suitable proportion. Dr. Calvert also states that it is a remedy for the foot-rot in sheep. Mr. Heath, the house-surgeon, uses one part acid to two parts water to sloughing wounds.

*** It cannot be doubted that this and other hydro-carbons, creosote, eupion, &c., from the same source, if they can be obtained pure and of definite strength, must be valuable remedies in a wide class of cases.

SANITARY STATE OF WINDSOR.

A RESPONSE has been made to the comments which we recently offered on a circular letter from the Clerk of the Board of Health, Windsor. In that letter the previous epidemic of typhoid fever was ignored, and great stress laid on the excellent system of drainage devised for that town by Mr. John Roe. We called attention to the fact, that the "excellent system of drainage" existed prior to that outbreak of typhoid; that the most observable blots on the sanitary condition of Windsor then were, that the sewerage was actually ventilated into the houses, and that surface nuisances abounded dangerously, according to the official reports to the Privy Council. As Mr. Voules was at that time disposed to overlook the remarkable limitations of the fever to precisely those parts of the town and Castle-mews which were placed under these disadvantageous circumstances, and was of opinion that the epidemic was not connected with these conditions, it was important to know to what extent they had been removed. It is stated that improved flushing power and ventilation have been provided; but it is admitted that "with reference to the removal of surface nuisances, some improvements may be effected."

We trust that these improvements may be carried out. With regard to the other "admission," that notwithstanding the good drainage of Windsor Castle, unpleasant smells are complained of in the basement, which point to the probable existence of undetected sources of atmospheric pollution, such as old cesspools, it is suggested that the delicate air-tests of Dr. Angus Smith—such as we described last week with reference to the detection of relative impurities in the atmosphere of railway carriages—might be very usefully employed here. The use of the properly applied permanganic solution affords very satisfactory evidence on this important point.

Correspondence.

"Audi alteram partem."

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

To the Editor of THE LANCET.

SIR,—In reproaching the twelve thousand medical men who do not support the Royal Medical Benevolent College, you to a certain extent do them an injustice. I imagine no one will dispute the usefulness of or even necessity for this noble institution, much less try to evade the duty of sustaining it on a scale commensurate with its capacity for meeting the wants of those for whose benefit it was specially built and endowed. I apprehend the non-contents can each give a substantial reason why his subscription is withheld. If good Mr. Propert can arrive at and classify these objections, he might perhaps be able to offer some explanation, or suggest some remedy to remove them. I will simply state my reason for withdrawing my subscription; and if others will do the same, he will soon have the requisite information upon which to act.

The poor, the friendless, and those residing at a distance from the metropolis, ought not to be more heavily weighted than their more fortunate competitors in the race for admission. A powerful London patron, or a wealthy friend who can employ and pay a sharp agent on the spot, are believed to be the only conditions for success. Success or failure, I understand, can be ascertained on or about the day of election. If a candidate requires more votes, it is only necessary to purchase them in any quantity for the occasion, and the hard-struggling aspirant from the provinces is distanced in the race, until after repeated unsuccessful attempts he gives up in despair.

This practice compels me to withhold my subscription, and I doubt not has the same influence on others similarly circumstanced.

I am, Sir, yours obediently,

January, 1862. JUSTITIA.

THE MEDICAL PROFESSION AND LIFE ASSURANCE OFFICES.

To the Editor of THE LANCET.

SIR,—I beg to forward you a sample of the method by which offices attempt to deprive the medical practitioner of his just demand:—

"Having referred the directors of the Rock Life Assurance Company to you for an account of my present and general state of health, I should esteem it a favour if you would communicate to them from your own knowledge such information respecting my constitution and general manner of living as may enable them to form an opinion on the safety and propriety of assuring my life.

"I am, Sir, your most obedient servant,

"To Dr. S. Day Goss, 161, Southwark-bridge-road." "——."

This information was decidedly refused unless the fee was granted, and the life was accepted without it.

I remain, Sir, yours, &c.,

January, 1862. S. DAY GOSS, L.R.C.P. Edin.

*** The hypothesis assumed in this case is, that the medical referee is employed by the proposer. It is a fallacious assumption, that has been found not to work. It is strange that any respectable office should place the slightest reliance upon it as a guide in the selection of lives.—ED. L.

SECURING THE CATHETER IN THE URETHRA.

To the Editor of THE LANCET.

SIR,—In your journal of last Saturday, Mr. John Hunter, of Manchester, mentions a plan for securing a catheter in the bladder *à propos* of one employed by Mr. Ernest Hart. Mr. Hunter will find what I believe to be an improvement on his plan described and figured by Mr. Christopher Heath in his valuable "Minor Surgery," in which the tapes are carried round the thighs and waist, and thus the ivory ring is more effectually secured than it can be by Mr. Hunter's arrangement.

Mr. Heath describes two other modes—one of them that with a strip of plaster; and gives the necessary caution that the integuments of the penis should be drawn forward before the strap is applied.

The fact that I have known practitioners on several occasions unable to secure a catheter in the urethra has induced me to trouble you with this.—I am, Sir, your obedient servant,

January, 1862. GENERAL PRACTITIONER.

CASE OF NUMEROUS FRACTURES, WITH RECOVERY.

To the Editor of THE LANCET.

SIR,—I read with some interest the case of numerous fractures recorded in your journal of last week by Dr. Davidson, and beg to send you the following particulars of a case which occurred in my practice some eighteen years ago.

A labouring man named Oxenbridge, employed under the late Lord Romney, was working in a quarry in Mote-park, his lordship's residence, when the upper part of the quarry fell, and Oxenbridge was buried in the ruins. When dug out, he was brought to the West Kent Infirmary, and I saw him two hours after the accident. On examination, three ribs on the left side were found fractured; the humerus, radius, and ulna, on the same side, at the elbow-joint, were smashed, feeling like a bag of marbles, but the skin was entire; there was a transverse fracture of both patellæ, a fracture of the left tibia and fibula, and a fracture of the right fibula: eleven bones fractured. He was for four days in all but a lifeless condition, but gradually rallied. Four weeks after the accident I amputated the left arm at the surgical neck, and eleven weeks after the accident he left the infirmary well. I met him about twelve months since, and he was able to walk and work; excepting the loss of his arm, as well as ever.

I am, Sir, your obedient servant,

FREDERICK FRY, F.R.C.S.,

Jan. 1862. Sen. Surg. West Kent Infirmary, Maidstone.

PRINCE AUGUSTO OF PORTUGAL has been removed to Lumiar for change of air, and is considered to be in a dangerous state, a bulletin being published daily, signed by nine doctors.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

Two days ago I passed a couple of hours in the wards of M. Maisonneuve, who, as your readers probably know, has been recently translated from the Hôpital de la Pitié to the Hôtel Dieu.

I had hoped to have been able to chronicle some case or other of the periosteal reproduction of bone, but was disappointed. One of the "internes," however, kindly showed me his note-book, and I found no less than six operations for stricture, in which the new urethrotome had been used with perfect success; recovery having been, in each instance, rapid and uncomplicated. Two of these cases still remained in the wards, as M. Maisonneuve deemed it expedient to ensure the permanent dilatation of the canal by occasional introduction of a metallic (pewter) sound. In introducing this instrument, the surgeon called attention to the facility with which catheterization is performed by the operator's standing on the right hand side of his recumbent patient, entering the instrument with its long axis at right angles to the median line of the trunk, and causing it to describe a quarter circle to the left on reaching the arch of the pubis. This mode of procedure is that universally advocated by MM. Civiale, Segalas, the late Leroy d'Etiolles, and most of the eminent lithotritists of the day. M. Maisonneuve seems to have a special affection for three kinds of external application; one, which he employs almost exclusively in the treatment of ulcerated surfaces, is glycerine and lint dressing; another, the copious onlaying of iodine tincture; and a third, the use of linen compresses, stiffened with plaster of Paris, in the treatment of fractures. Although the latter method possesses, so far as its principle is concerned, no novelty, yet the universality of its application merits a mention. I witnessed the setting of a fractured thigh in an old man by this mode of proceeding, and, *cæteris paribus*, would most certainly give it the preference, in consideration of facility and rapidity of execution. Four substantial compresses, well saturated with the solution, were adapted to each aspect of the limb *next the skin*, and secured *in sitû* by a broad stout roller. The surgeon commenced with the upper and abdominal end of the thigh, making several firm passes round the pelvis, and descending over the knee and skin to a little above the ankle, when a Nélaton's T splint, for steadying the foot, was adjusted, and included in the turns of the bandage, an addition which completed the process. During the course of my visit, I could not help remarking, that although an efficient staff of assistants were in attendance, all of whom had undergone more or less severe examinations for the privilege of *internat* or *externat*, little if any, work fell to their lot, beyond the restraining of a refractory patient, or the fetching and carrying of a candle, pot of cerate, or the preparation of the dextrine compound; and, as a *ci-devant* London in-dresser, I felt, as the Americans say, "riled and diagrumbled some," to see how few were the crumbs that fell from that rich man's table.

In the female wards I came to a case of vaginitis, with ulceration of the neck of the womb, under treatment by continued irritation. The perpetuity of the uterine douching was well managed; from a pail full of water suspended over the patient's bed there descended a syphon-tube of vulcanized india-rubber; this tube (through which the flow was determined, in the first place, by the compression of a hollow caoutchouc ball in connexion with it) conveyed the fluid through a plug of the same material, accurately fitting the vagina, to the diseased organ, its return being effected through a second tube, which likewise traversed the plug, and hung into a vessel placed on the ground. In a case of hydrathrosis of the knee, M. Maisonneuve brushed the joint over with tincture of iodine, covered the application with a linen compress, and secured the whole by a few turns of a caoutchouc roller. The equable and constant pressure of the india-rubber bandage is, he states, highly advantageous in furthering the absorptive process. I likewise saw the pince-à-griffes removed from the knee of an elderly female who had sustained transverse fracture of the patella. The instrument had remained *in sitû* for five weeks, and the repair of the lesion seemed highly satisfactory, excepting, indeed, to the patient, whose quadriceps femoris appeared bent on essaying the authenticity of the cure. The majority of the male surgical wards of the Hôtel Dieu, since the demolition of part of the old building, have been transferred to the Bureau Central; and although

some amelioration in their sanitary condition might have been expected, I cannot say that any such improvement was apparent in the aspect of the various wounds; not one of those I saw was healing kindly.

Medical News.

MEDICAL SOCIETY OF LONDON.—A special meeting of the Society was held on Monday evening, Mr. Coulson, President, in the chair. The following address of condolence was moved by Mr. Rogers-Harrison, seconded by Dr. Lankester, and carried unanimously:—

"*To the Queen's Most Excellent Majesty.*

"May it please your Gracious Majesty,—We, the President and Fellows of the Medical Society of London in special meeting assembled, most humbly solicit your Majesty to accept the tribute of our sincere condolence under the dire bereavement your Majesty has sustained.

"We pray that the Almighty Disposer of events may, in His unbounded mercy, grant your Majesty the blessing of His grace, to enable your Majesty, and your Majesty's august family, to bear with fortitude and resignation the irreparable loss which your Majesty, in common with the whole nation, has been visited with, in the decease of the late Prince Consort:—a Prince as universally beloved whilst living as mourned now dead; not more for his talents and his usefulness, which have enrolled his name amongst the Great and Good that have passed from us, than for his exemplary social virtues, which have placed him before the nation as a pattern and model for the discharge of every domestic and public duty.

"May it please Almighty God to pour down on your Majesty the continual dew of His blessing, and vouchsafe to your Majesty long life and health to reign over a devoted and loyal people."—Signed by the President, in behalf of the Fellows of the Medical Society of London.

THE POOR-LAW BOARD have announced, that they are prepared to recognise persons holding the degree of Master in Surgery in the University of Durham, if registered under the provisions of the Medical Act, 1858, as qualified by law to practise Surgery in England and Wales, under the terms of the Board's orders of the 10th of December, 1859.

ROYAL INSTITUTION OF GREAT BRITAIN.—At a special general meeting, on the 13th inst., an address of condolence to Her Majesty the Queen, in reference to the decease of H.R.H. the Prince Consort, Vice-Patron of the Royal Institution, on December 14th last, was read and unanimously adopted.

UNIVERSITY OF EDINBURGH—EXAMINERS IN MEDICINE.—At a meeting of the University Court of the University of Edinburgh, held on the 11th Inst.—present, the Right Hon. W. E. Gladstone, Lord Rector, Principal Sir David Brewster, the Hon. the Solicitor-General, Robert S. Grieve, Esq., Dr. Brown, Dr. Alexander Wood, and Dr. Christison—the following gentlemen were elected Non-Professorial Examiners in the Faculty of Medicine,—viz., Dr. James Begbie, F.R.C.P., Dr. William Robertson, F.R.C.P., and Dr. Douglas Maclagan, F.R.C.S.

SUSSEX COUNTY HOSPITAL, BRIGHTON.—A bequest of £100 has been left to this hospital, by the late Thomas Broadwood, Esq., sen., of Holmbush, Sussex, and of Cadogan-place, Belgrave-square.

THE UNIVERSITY OF ST. PETERSBURG has been again closed, and the professors and students have been dismissed by an Imperial decree.

THE CHESTER INFIRMARY.—We are glad to state that the ball in aid of the funds of this institution, notwithstanding the discouraging circumstances under which it took place, consequent on the lamented death of the Prince Consort, was extremely successful. The nett proceeds were £129 12*s.*, exceeding the balance from last year.

THE HOSPITAL FOR INCURABLES.—Complaints are made of the award of the Building Committee of the Royal Hospital for Incurables, and it is urged that the committee can have no objection to give the name of the architect who awarded the premium.

DR. BARKER ON SEWER GAS.—A lecture was recently delivered by Dr. Barker on the four gases, oxygen, hydrogen, carbonic acid, and nitrogen, in the course of which the lecturer went fully into the history and causes of typhus and typhoid fever.

ANATOMICAL MUSEUMS AT CAMBRIDGE.—The long-discussed buildings for the University of Cambridge seem at last likely to have a solid existence. It is proposed to construct a large edifice to contain Museums for Comparative Anatomy and Zoology, Botany and Mineralogy, together with rooms for the Professors. Human Anatomy and Chemistry remain as at present.

UNWHOLESOME FOOD.—At a meeting of the City Commission, held at Guildhall, Dr. Letheby, the Medical Officer of Health, reported on the state of 187 houses inspected during the week, and submitted a list of 143 places for sanitary improvement. He also reported that the market and slaughter-houses had been inspected, and that in the course of the week 1008 pounds of meat had been seized, and also 864 head of game and poultry, as unfit for human food.

HEALTH OF JAMAICA.—According to the accounts of the last mail from Jamaica the public health was not very good, fevers and measles being excessively prevalent.

CASE OF HOWARTH *v.* WHITE.—In this case, the plaintiff obtained a verdict of 40*s.* damages, for the alleged seduction of his daughter by the defendant, a dentist, whilst under chloroform. On Wednesday, Mr. T. Jones moved for a new trial, on the ground that the verdict was against the evidence. After a long argument, the Lord Chief Justice, upon conferring with the other members of the court, said he thought there ought to be no rule. Mr. Justice Crompton (who tried the action) did not feel himself in a position to say that he was dissatisfied with the verdict, and he (Lord Chief Justice Cockburn) did not see, on the evidence to which the attention of the court had been directed, that the verdict was so wrong that the cause should be sent down to a second trial. Mr. Justice Crompton said the trial occupied more than one day, and he had had an opportunity in the interval of considering the case, and found it to be one of considerable difficulty; but he thought that the jury by their verdict had rather solved that difficulty. His Lordship said he could not say he was dissatisfied with the verdict of the jury in fixing the defendant with the paternity of the child, and he thought the jury saw the thing in the right light in coming to that conclusion. Mr. Justice Blackburn concurred.—Rule refused.

THE LATE KING OF PORTUGAL.—The public at Lisbon have been in a great measure disabused of the suspicion of poison, although the chemical report had not been fully published. No further disturbances were feared.

IMPURE PARAFFINE OIL.—An inquiry has terminated as to the circumstances attending the death of G. T. Danser, a boy of eleven years of age, who died from an explosion of paraffine oil, whilst engaged in pouring a large quantity from one can to another. The accident also seriously injured a carman, and caused a fire which destroyed the house in which it occurred. The injured man, Wright, stated that the deceased held the candle not more than four or five inches from the fluid he was pouring off, so that it must have been the vapour given off, and not the oil itself, which exploded. The jury pronounced a special verdict, to the effect, "That the deceased died from injuries caused by the explosion of vapours thrown off from a certain oil called paraffine oil; that pure paraffine oil is not explosive, but that a noxious and spurious article is largely sold as such to the extreme danger of life and property; that some legislative measures should be adopted to protect the public safety."

VICTORIA-PARK HOSPITAL: ELECTION OF AN ASSISTANT-PHYSICIAN.—At a meeting of the Governors of the Hospital for Consumption, Victoria-park, it was stated that the number of patients received into the wards during the past year had been 466, being 41 more than the preceding year. The number of out-patients relieved by the charity has been 8711, showing an increase of 986. The total expenditure for the year had been £6247 12*s.* 6*d.*, leaving a balance in hand of £235 9*s.* 11*d.* The arduous duties of the physicians, arising from the large number of out-patients, rendered it necessary to make an increase in the number of the medical staff. Dr. Ingram was appointed assistant-physician, subject to the confirmation of the annual court. The committee tendered their sincere thanks to the medical officers, and desired especially to mark their continued sense of their valuable services.

UTILIZATION OF METROPOLITAN SEWAGE.—The plans, drawings, and Bill to be presented to Parliament by Messrs. Napier and Hope, the intended contractors for the sewage of the northern portion of the metropolis, are now printed, together with the reports of Messrs. Bazalgette and Smith, the engineer and solicitor of the Metropolitan Board of Works.

SALFORD PRISON.—Previous to the opening of the business of the Salford Hundred Quarter Sessions, Mr. W. B. Scott, the surgeon, reported as to the sanitary condition of the New Bailey prison, to the effect that the state of the prison had been satisfactory in every way. The number admitted into the hospital attached to the prison (33 surgical and 32 medical) was below the average. There had been 3 births.

CAMBERWELL HOUSE ASYLUM.—On Friday, the 3rd inst., Dr. Paul, of Camberwell House, gave one of a series of entertainments to the patients under his care, a large number of professional and other friends being invited to visit and mix with them. The first part of the entertainment consisted of a selection of vocal and instrumental music, in which some of the officers, and more than one of the inmates assisted. The second part included a performance of the laughable farce, entitled, "The Ugly Customer," the various characters of which were ably sustained by the resident medical officers and others connected with the house. The patients, who behaved themselves most decorously, were delighted, and there is every reason to believe that these occasional diversions tend much to improve the mental condition of the inmates. What a contrast these proceedings afford to the harsh system upon which the treatment of the insane was formerly almost universally conducted!

DANGERS OF ARTIFICIAL TEETH.—The wife of an innkeeper, in Derbyshire, awoke some nights ago and was surprised to find that she had partially swallowed a plate and four false teeth, which she had omitted to take from her mouth before going to bed. With a little trouble, they were extracted from her throat.

SHEFFIELD HOSPITAL AND DISPENSARY.—Mr. S. Parker, jun., was unanimously re-elected at the meeting of the Quarterly Board of Governors, one of the surgeons to this institution, and received the best thanks of the governors for his valuable services during the past year. At the same meeting, Dr. J. C. Hall moved, and Dr. Webster seconded, an addition to Rule 32, providing for receiving as qualification for any future house-surgeon, the new licence in medicine of the Royal College of Physicians of London.

BETHLEHEM HOSPITAL ARBITRATION.—On Thursday last, at the vestry-hall, St. George's, Southwark, the overseer presented the award of Mr. George Pownall, with regard to the Bethlehem Hospital, to whom the pending issue had been referred, whereby the annual rateable value of the premises was arbitrated at £3728, inclusive of the house of occupation. The governors had instituted an appeal against the assessment; but Mr. Pownall's award is mutually binding on all parties.

A RARE CAUSE OF POISONING.—The exact influence of fumes of nitric acid on human life is not known. The following example is hence suggestive of questions of interest:—Two men employed in a manufactory of chemical products at Saint Denis, were found dead in the street a short time after they had quitted their employment. A medical man declared that death had been occasioned by their having been too long exposed to the fumes of nitric acid. The bodies were taken to the Morgue to undergo further examination.

Obituary.

DR. PINKERTON, R.A.

THERE are many Edinburgh medical students who will be grieved to hear of the death of their old friend, Dr. Pinkerton. Archibald William Pulteney Pinkerton was the only surviving son of the late Captain Pinkerton, of the Royal Marines, and nephew of the late Dr. Alison, the well-known Professor of the Practice of Medicine in the University of Edinburgh. Following in the footsteps of his uncle, he early embraced the profession of Medicine, and graduated at the University of Edinburgh in 1850. After graduation, he served for twelve months as resident physician in the Edinburgh Royal Infirmary. He then travelled for some years in the capacity of a private physician, and, as the result of his observations during this period, published two excellent papers, on the Climate of Malaga, and on the Climate of Teneriffe, in the *Edinburgh Monthly Journal of Medical Science* for 1853 and 1854. He afterwards practised for a year at Bournemouth, and published a series of lectures on the medical capabilities of that watering place, the proceeds of the sale of which were devoted to the payment of Scripture-readers going to the Crimea.

When the Crimean war broke out, he volunteered his services to the army, and was appointed assistant-surgeon on the staff. Proceeding to the Crimea in the spring of 1855, he was attached to the 72nd Highlanders, and was present with that corps during the severe outbreak of cholera that followed its arrival in the East. His patient assiduity, untiring watchfulness, and resolute discharge of duty, endeared him to every officer and soldier in its ranks. Present in the trenches during the assaults upon Sebastopol on the 18th of June and 8th of September, he shared in the dangers as well as in the hardships of the siege.

Returning to England on the peace, and believing the army no longer likely to afford occupation to a zealous student of his art, he quitted its ranks, and turned for a time to civil practice. In 1857 he published in the *Edinburgh Medical Journal* three papers, entitled "Cases of Fever as seen in the Crimea," "Phthisis and Climate," and "The Spread of Cholera by Personal Communication." His accumulated observations on the effect of climate on various diseases were now, for the benefit of his profession, given to the public in a series of lectures on Climatology in the Surgeons' Hall at Edinburgh. The introductory lecture, which was published, displayed great originality and research.

No sooner did the Indian mutiny break out, than Pinkerton once more turned to the pursuit of his choice, and was re-appointed an assistant-surgeon on the staff, and sent out to Bengal. On going up country to join the army in the field, he was selected by Lord Clyde, the Commander-in-Chief, to fill temporarily a medical appointment on his personal staff; and on the return of peace he was appointed to the Royal Artillery, and placed in the medical charge of the Sanitarium at Nynee Tál. When his two years' period of service there had expired, he proceeded to do duty at Allahabad. That severe and desolating epidemic which swept with such destructive force across the Indian Continent last autumn soon reached the station, and, foremost at the post of duty, Pinkerton was early struck down by cholera. When all hope seemed past, he rallied, and recovered so much that he was sent to Aden to join his battery of the Royal Artillery. But on his arrival there, fever set in. This, supervening on a constitution broken by suffering, proved fatal; and, after a few days' illness, he sank peacefully to rest on the 21st November, 1861, at the early age of thirty-two.

Tall of stature, gentle in manner, kindly in disposition, he was equally beloved by his friends in civil life, and dear to his comrades in the camp. Ardently attached to and highly skilled in his profession, he veiled much talent beneath a modesty which permitted it only to appear when suffering was to be alleviated or duty to be done. He knew no one who did not become his friend, and by no friend will he ever be forgotten.

HENRY DAVIES, F.R.C.P. LOND.

AT the goodly age of eighty years, Dr. Henry Davies has gone to his rest. The beginning of his career ascends to the early days of obstetric science in this country. For many years he occupied a distinguished position amongst the obstetric practitioners of the metropolis. Like Denman, he entered the profession as an assistant-surgeon in the Navy; like Denman, too, he earned a reputation as a private lecturer in days when there were no hospital lecturers on midwifery. About twelve years ago Dr. Davies retired from town, and settled for a time at Brighton. At this period many of his old friends, including many who had known him in the Royal Naval Service, joined in a public manifestation of their regard for his personal and professional character. He afterwards came to London, and again engaged in practice at Duchess-street, Portland-place.

MEDICAL VACANCIES.

THERE is a vacancy for an Assistant-Physician to the Charing-cross Hospital.

The election of a Surgeon to the Royal General Dispensary, Bartholomew-close, in the room of Dr. Gaiton, who has resigned, will take place on the 12th proximo.

There is a vacancy for a Resident Clinical Assistant in the Brompton Hospital for Consumption and Diseases of the Chest.

A vacancy has arisen for a Physician to the Sussex and Brighton Infirmary for Diseases of the Eye, by the resignation of Dr. Henry Moon.

There is a vacancy for a Poor-law Medical Officer for the Huntingdon District of the Kington Union, Herefordshire.

MEDICAL APPOINTMENTS.

MR. GEORGE AUGUSTUS ANGIER has been elected House-Surgeon and Secretary to the East Suffolk Hospital, Ipswich, in the room of Mr. Frederick Gull, resigned.

Mr. William Mi hael Whitmarsh has been elected Resident Medical Officer of the Birmingham and Midland Free Hospital for Sick Children.

Mr. George William Glasier, of Lincoln, has been elected by the Poor-law Guardians to be Medical Officer for the South District of the Lincoln Union, in the room of Mr. Osborne Johnson, who has held the appointment (to which he has been elected annually in consequence of non-residence within the district) for the last three years. The latter gentleman has intimated his intention of appealing to the Poor-law Board.

Dr. Fitzpatrick has been selected to act as substitute for Dr. Geo. Matthews Den, for the Kilmacavogue Dispensary District, Ireland.

Mr. James Golby Rusher has been elected Medical Officer for the Upton-Snodbury District, in the Pershore Union, Worcestershire, in the room of Mr. Thos. Wm. Walsh, resigned.

Mr. E. Stokes Roberts, junior, has been elected House-Surgeon to the Chester General Infirmary, in the room of Mr. J. Hughes; and Dr. W. N. Dugzan has been elected Assistant House-Surgeon, in the room of Dr. George Charles Walker.

Dr. John Maule Sutton has been elected one of the Physicians of the Queen's Hospital, Birmingham, in the room of Dr. Wm. Francis Noott, resigned.

Mr. John Bridges Mason has been appointed Medical Officer for District No. 1 of the Ross Union, Herefordshire, and to the Ross Dispensary, vice Mr. Chas. Edmunds Thomson, resigned.

Births, Marriages, and Deaths.

BIRTHS.

On the 31st of Dec., at Navan, Ireland, the wife of Wm. Timmin, M.D., of a son.

On the 5th inst., at the Hospital, Rutland-square, Dublin, the wife of H. S. Halahan, L.K.Q.C.P.I., of a daughter.

On the 6th inst., at Castletown, Isle of Man, the wife of Thomas Wise, Esq., Surgeon, of a daughter.

On the 9th inst., at Portland Villas, Plymouth, the wife of R. T. C. Scott, Esq., of Melby, Zetland, Staff-Surgeon, Royal Navy, of H.M.'s Ship *Royal Adelaide*, of a daughter.

On the 11th inst., at Somerset-street, Portman-square, the wife of Wm. O. Priestley, M.D., of a son.

On the 11th inst., at Hanwell, the wife of W. H. O. Sankey, M.D., of a son.

On the 11th inst., at Coningsby, Lincolnshire, the wife of Carr Holstok Roberts, Esq., M.R.C.S., of a daughter.

On the 12th inst., at Brook-street, Stoke-upon-Trent, the wife of Charles Holtom, Esq., M.R.C.S., of a son.

On the 13th inst., at Finsbury-square, the wife of S. Gibbon, A.B., M.B., of a daughter.

DEATHS.

On the 28th of Sept., at Church-square, Cape-town, Cape of Good Hope, George H. Syme, M.D.

On the 6th inst., at Southernhay, Exeter, Laura, relict of John Hackall, M.D., aged 89.

On the 10th inst., at South Moor House, near Sunderland, J. R. Croudace, M.D., only son of the late J. Croudace, Esq., Surgeon, of Sunderland.

On the 9th inst., James Williams, M.D., of Southwold, Suffolk, one of the Borough Magistrates, and Alderman of the Corporation, aged 45.

On the 13th inst., Susan, the wife of John Knaggs, Esq., M.R.C.S., of Euston-grove, late of Euston-square.

Medical Diary of the Week.

MONDAY, JAN. 20

- ROYAL FREE HOSPITAL.—Operations, 2 P.M.
- METROPOLITAN FREE HOSPITAL. — Operations, 2 P.M.
- MEDICAL SOCIETY OF LONDON. — 8½ P.M. Mr. I. Baker Brown, "On a Case of Suppressed Menses, with Absence of the Vagina."

TUESDAY, JAN. 21

- GUY'S HOSPITAL.—Operations, 1½ P.M.
- WESTMINSTER HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Mr. John Marshall, "On the Physiology of the Senses."
- JUNIOR MEDICAL SOCIETY OF LONDON.—8 P.M. Meeting at University College. — Mr. Griffiths, "On the Greater Frequency of the Deposition of Tubercle at the Apices of the Lungs."
- PATHOLOGICAL SOCIETY OF LONDON. — 8 P.M.

WEDNESDAY, JAN. 22

- MIDDLESEX HOSPITAL.—Operations, 1 P.M.
- ST. MARY'S HOSPITAL.—Operations, 1 P.M.
- UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M.
- ROYAL ORTHOPÆDIC HOSPITAL. — Operations, 2 P.M.
- GEOLOGICAL SOCIETY OF LONDON.—8 P.M.

THURSDAY, JAN. 23

- ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
- CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 1 P.M.
- LONDON HOSPITAL.—Operations, 1½ P.M.
- GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M.
- LONDON SURGICAL HOME.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat."

FRIDAY, JAN. 24

- WESTMINSTER OPHTHALMIC HOSPITAL. — Operations, 1½ P.M.
- ROYAL INSTITUTION. — 8 P.M. Prof. Rolleston, "On the Affinities and Differences of the Brain of Man and the Brains of Certain Animals."

SATURDAY, JAN. 25

- ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.
- ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
- KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
- CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Rev. A. S. D'Orsey, "On the English Language."

THE LANCET INQUIRY

ON THE

INFLUENCE OF RAILWAY TRAVELLING UPON PUBLIC HEALTH.

THE fourth Report of the Commission will appear next week, and will include the consideration of the Influences of Railway Travelling on persons affected with Diseases of the Heart, Lungs, Brain, Spinal Cord, and other Organs.

THE ANALYTICAL SANITARY COMMISSION.

RECORDS OF THE RESULTS OF

MICROSCOPICAL AND CHEMICAL ANALYSES

OF THE

SOLIDS AND FLUIDS

CONSUMED BY ALL CLASSES OF THE PUBLIC.

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BREAD,

AND ITS ADULTERATIONS,

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To Correspondents.

A. J. W.—In the event of any alteration in the Medical Act, it is probable that the clauses referred to will meet with due consideration. Registration is not compulsory; but no unregistered practitioner can recover in a court of law for services rendered, or give a certificate which would have the force of a legal document.

M.B.—The subject will be noticed at the proper time.

A Young Naturalist.—Whether swallows do or do not hibernate, in the proper sense of the term, is not yet decided. Refer to Mr. Gosse's "Romance of Natural History," Second Series.

Mr. Jervison (Rothwell) shall receive a communication from us shortly.

THE ILLNESS OF THE LATE PRINCE CONSORT.

THE desire of the medical profession to receive a more satisfactory account of the illness of the late Prince Consort had nothing in it which was calculated to wound the susceptibilities of the medical advisers of the Prince; nor has it been so interpreted by those most concerned. A statement was desired which might reconcile obvious imperfections in the bulletins, due to the essential character of such documents, and the especial necessity in this case of avoiding any expressions or names which might alarm the Royal patient, who was in the habit of seeing the daily papers. Some medical journals have misinterpreted the wish for a connected account of the illness, and have shown a malicious warmth in rebutting insinuations which they have invented. The treatment is a matter for which the profession have never manifested any desire; and if the natural wish for a satisfactory statement of the illness should subsequently be satisfied, we are of opinion that all reference to treatment ought to be omitted. Supposing the history of the reign of her present Majesty should be written, where is there to be found a consistent or satisfactory account of the illness of the late Prince Consort?

Impartial.—For obvious reasons we did not publish the letter of Dr. Stewart. We cautiously refrained from making any *ex-parte* statements on a matter which was eventually to be decided by some competent tribunal. Dr. Stewart submitted to arbitration, or at all events to inquiry, at the expiration of nearly three-quarters of a year. The letter which he has published elsewhere would, we think, have been better withheld. At all events, actuated by the spirit of fair play to the parties concerned, we refused its admission in the columns of THE LANCET.

Nemo should address the board of guardians in reference to his case.

PERTUSSIS.

To the Editor of THE LANCET.

SIR,—If you happened to be a middle-aged gentleman, and your wife in her *première jeunesse*, and under these circumstances you were blessed with a son and heir, and then years rolled on, and your lady gave no sign of presenting you with another "pledge," you would sympathize with an anxious pair, suffering under these very circumstances, and their "phenomenon," having arrived at four years of age, being the victim of the above horrible disease. In fact, I am the man, and, strange enough, always thought I was pretty strong in the treatment of this disease. I never witnessed many of the paroxysms in my little patients, and, on the whole, was always satisfied with my treatment, the sufferer gradually getting well under emetics, alteratives, and especially anodynes at night, and spinal frictions. I admit that the mammas did sometimes look very lugubrious, and even hint that one did not know how bad the little patients were. Still they all got well in time, and it was not until my young one enabled me to make a domestic study of the disease that I became fully alive to its powers of worrying anxious parents. But, Sir, I did not begin with this subject with the intention of obtruding my sorrows and anxieties, although they have cropped out in some degree. My object is to relate how I cured my boy, also how I foolishly tried to cure him by some quack stuff, and failed. The last first.

I was going on with my usual treatment, and he seemed to be getting on fairly well; but still the treatment did not quite satisfy me, as, although doubtless the anodynes are beneficial, I suspect they only soothe or mask the disease, and do not eradicate the *causa malorum*, which must take up its quarters somewhere, manifesting itself as an irritant of the nervous system. A lady said, "Why don't you cure your's as I have done my little boy? I never called in the doctor with any of my children (a large family), and the youngest has just recovered from a very severe attack after a week's treatment with balsam of sulphur." There is no doubt of the truth of this, and I was, of course, interested, especially as she said the remedy was never-failing in the numerous cases where she had recommended it amongst her friends. The dose is only a drop for each year of age night and morning. The preparation is sold at sixpence per ounce, and is called "Aniseed Balsam of Sulphur." The aniseed is, I presume, used to cover the very nasty flavour. The remedy is old-fashioned for pulmonary complaints, much used in some places, and I should be thankful if your readers would notice it, and try its effects. If it turns out to be so powerful to cure this very mysterious complaint, as my friend has proved it to be, not only is it important so far, but it would be most valuable to investigate the nature of the medicine and its action, as many other maladies may be subject to this peculiar preparation of sulphur. I understand that a week's use of it is sufficient. I persisted for three days and nights, and my boy was so much worse that I had not sufficient firmness to go on, and returned to rational medicine. I am happy to say he soon got right, and I think the most important part of my remedy was the persistent use of alkalies, and next of anodynes. After an alkaline draught, the little fellow used to say it came up his nose; so there was plain proof of the acidity of the stomach, and, of course, this acidity may easily account for the convulsive cough. Still I have reason to believe firmly in the other cure; and if it is a cure, it strikes me that it destroys the disease itself, while my mode removed its manifestations only, allowing Nature to do the rest. So far well. But I shall be very grateful if any of our brethren can throw any light on this very curious subject.

I am, Sir, yours very respectfully,

January, 1862. F.R.C.S.

A Subscriber, (N.B.)—It was stated in the *Philadelphia Medical and Surgical Reporter* that there were about *forty* regular medical journals published in America, but that not *five* of them paid their expenses. Since the commencement of the war, many of these journals have ceased to exist. The greatest loss to the profession generally is in the discontinuance of the *North American Medico-Chirurgical Review*, edited by Dr. Gross. This was a most useful periodical.

Sales.—Without a letter of recommendation.

Pater will find all the information relating to the regulations of the Colleges in the Students' Number of THE LANCET.

Mr. Hicks, (Tonbridge Wells.)—We regret that our correspondent differs from us in opinion.

Dr. Roberts, (Manchester.)—The lectures shall be inserted.

Mr. H. Brogden.—Such notices are unsuited for a medical journal.

A Tyro will find some valuable information upon photography as applied to medicine and the representation of living organisms in the *Photographic Journal* for December 16th. Our correspondent should refer to the abstract of Mr. Macfarlane's paper, as also to the memoir of Professor Rood. We are informed that Dr. Dresser has succeeded in photographing the fixed lines of the spectrum upon a surface of phosphorus, and in taking upon it prints from negatives.

A Pupil.—Before October, 1862.

An Assistant, (L.N.)—Our correspondent may bear in mind a statement recently made by Dr. Hudson, late resident physician at the Melbourne Hospital, that "in syncope from aortic insufficiency, the recumbent posture, with firm alternating pressure over the cardiac region, seems to be a ready means of recovery."

Mr. Henry George's paper, "On the Use of Zinc in Cancer," shall appear in our next impression.

Norwich.—The gentleman is quite unable to appreciate the bearings of a question of this importance. Both he and his friend the "editor," who chooses his effete nonsense, entirely misrepresent the tenor of the remarks we have felt it our duty to make.

A Constant Reader and Subscriber, (Dudley.)—Most likely at Jozeau's, pharmacien, Haymarket, London.

A Surgeon.—The preparation is advertised weekly in the pages of THE LANCET.

Justice.—By an action at law.

Doubtful.—1. What "other qualifications" are alluded to? The diploma, to be legal in this country, must be registered.—2. The answer to this question is involved in the above reply.

W. C. P.—Yes, if there be no bye-law of the Society against it.

INFLUENCE OF RAILWAY TRAVELLING ON HEALTH.

An Old Railway Guard writes (in reference to the payment and work-time of the men): "On our line it is not guards who are paid by time on duty, but engine-drivers, who are so paid at the rate of twelve hours per day. They are *obliged* to work from sixteen to eighteen hours, and sometimes twenty hours, for three or four days together, and are compelled to rest the next day, so that they may not make more than six days per week. This is a cause of great dissatisfaction with the drivers; but, as you say, there is no appeal." When the dangers to the public arising from the system of overworking the men is brought before Parliament, this method of making up a weekly average will not be overlooked.

E. P. S.—It would be impossible to comply with the request for want of space. The figures quoted are all calculated from the latest returns, with certain modifications which have been previously overlooked.

Mr. P. S. Smith's pamphlet has been received, and shall have careful attention.

A Lady.—By way of making the figures more clear, we may explain that, before it would come to our correspondent's turn to be killed when journeying by rail, she would have to travel continuously, day and night, for nearly five hundred years. So she need not be nervous about her individual risk. It is very much greater in the cab.

COMMUNICATIONS, LETTERS, &c., have been received from — Prof. Owen; Dr. Francis Hawkins; Mr. Solly; Dr. C. Hayman, Axminster, (with enclosure;) Mr. George; Dr. Down, Earlswood, Redhill; Mr. George Owen; Dr. Dale; Mr. Fred. Fry, Maidstone; Mr. Henry Thompson; Mr. Holton; Dr. Merriman; Mr. Smith, Brighton; Mr. A. Coleman; Dr. J. D. Corrigan, Dublin; Dr. Strange, Worcester; Mr. E. J. Lewis, Rawtenstall, (with enclosure;) Mr. J. C. L. Carson, Coleraine; Miss Hearne, Lincoln; Mr. W. J. Llewellyn; Mr. J. Arroll, (with enclosure;) Mr. H. M. Ormerod; Mr. A. Wingate, (with enclosure;) Mr. T. Wilson, Liverpool, (with enclosure;) Mr. Brogdon; Mr. Ashton; Mr. R. F. C. Scott, H.M.S. *Royal Adelaide*, Liverpool; Mr. Rodgers; Mr. Hogg; Mr. J. C. Barrow, Totall; Mr. W. Crofts, (with enclosure;) Dr. Hodgson, Preston, (with enclosure;) Dr. Jas. Adams, Ingatestone, (with enclosure;) Mr. B. Johnstone; Mr. Hicks, Tonbridge; Mr. P. H. Banks, (with enclosure;) Mr. T. Skinner, Liverpool; Mr. R. Jones, (with enclosure;) Mr. J. H. Kimbell, Knowle, (with enclosure;) Mr. T. Blanshard, (with enclosure;) Mr. H. Green, (with enclosure;) Mr. J. Mumford, (with enclosure;) Mr. W. Ellis, Morley; Mr. J. Staniland, Buncham, Mr. F. P. Weaver, Chester, (with enclosure;) Mr. H. T. Higginson, Dublin; Mr. J. Messent; Mr. Rowland, (with enclosure;) Mr. J. Pickering, Swineshead; Mr. C. V. Brown, St. Aldates, (with enclosure;) Mr. J. Lidderdale, Osmington; Mr. T. A. Hayes, (with enclosure;) Mr. Walker, Wotton Park; Dr. Williams, Bracknell; Mr. H. Evans; Mr. E. Supple, (with enclosure;) Mr. T. Chevallier, Durham University; Mr. J. M. Fothergill, Newcastle, (with enclosure;) Mr. W. Towne, Billingborough, (with enclosure;) Mr. S. Warren, Tutbury, (with enclosure;) Mr. Foote, Louisbro'; Mr. E. P. Phillips, Haverfordwest; Mr. Downes, Munslow; Mr. Freeman, Saxmundham; Dr. Foreman, Brighton; Mr. S. W. Barker, Lynam; Mr. S. Rogers, Bristol, (with enclosure;) Mr. A. Hornby, Swanwick; Dr. Guppy, Falmouth, (with enclosure;) Dr. Cocks, Dundee, (with enclosure;) Mr. Southam, Manchester, (with enclosure;) Mr. Clarke, Lynton, (with enclosure;) Mr. Woodward, Worcester, (with enclosure;) Dr. Lay, Passenhall, (with enclosure;) Dr. Hamilton, Tarbert, (with enclosure;) Mr. M'Bean, St. Andrews; Pater; Southampton Medical Society; A Constant Reader and Subscriber; Nemo; Doubtful; A. Z., (with enclosure;) Medicus, (with enclosure;) J. L., Ballycastle, (with enclosure;) L.A.C., (with enclosure;) E. W. O.; A Surgeon; J. C., Minster, (with enclosure;) W. C. P.; Medico-Chirurgicus; Justice; Royal Institution; A Young Naturalist; &c. &c.

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